NAVSHIPS 93594 *(Non-Registered)*

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INSTRUMENT LOAN
AND
REPAIR DEPT.

TECHNICAL MANUAL

for

RADIO RECEIVING SET AN/SRR-11A

THE MAGNAVOX COMPANY
FORT WAYNE, INDIANA

DEPARTMENT OF THE NAVY
BUREAU OF SHIPS

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From: Chief, Bureau of Ships
To: All Activities concerned with the Installation, Operation, and Maintenance of the Subject Equipment

Subj: Technical Manual for Radio Receiving Set AN/SRR-11A, NAVSHIPS 93594

1. This is the Technical Manual for the subject equipment and is in effect upon receipt.

2. When superseded by a later edition, this publication shall be destroyed.

3. Extracts from this publication may be made to facilitate the preparation of other Department of Defense publications.

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Chief of Bureau

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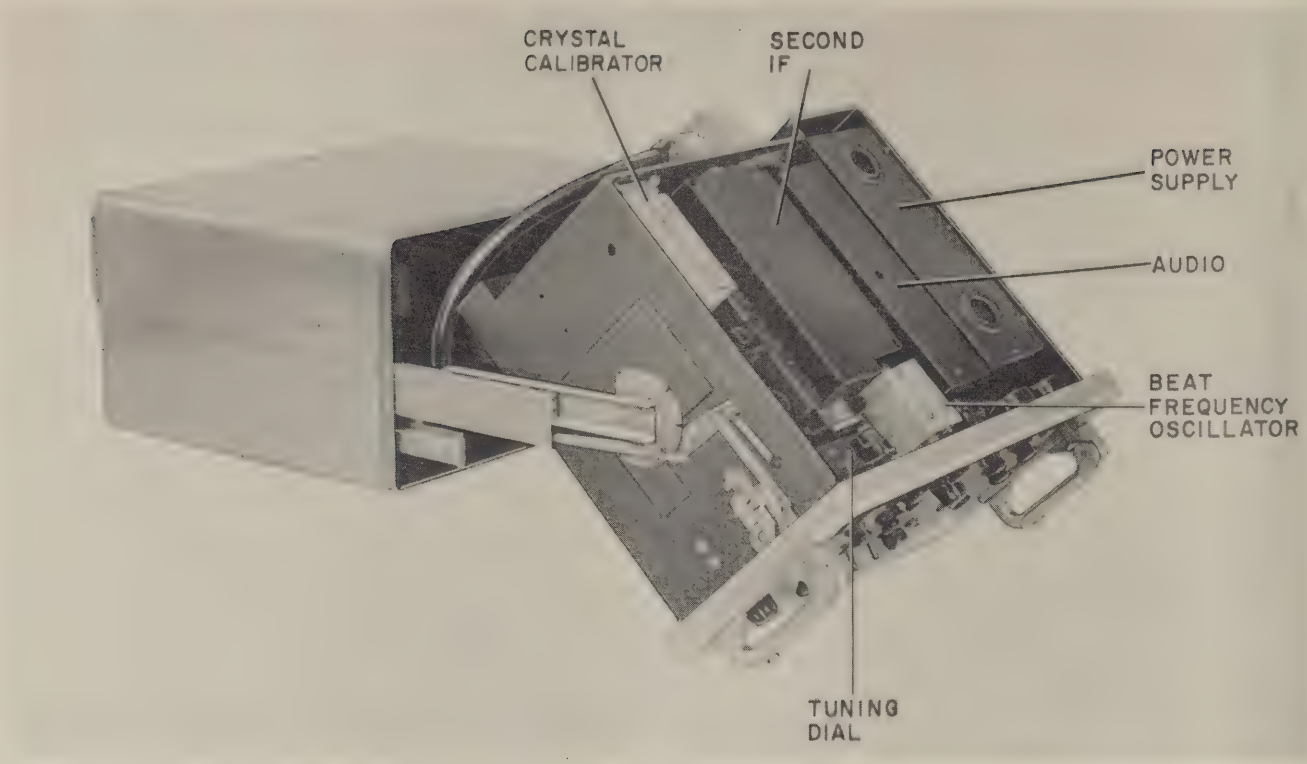


Figure 1–2. Subassemblies Accessible from Top of Chassis

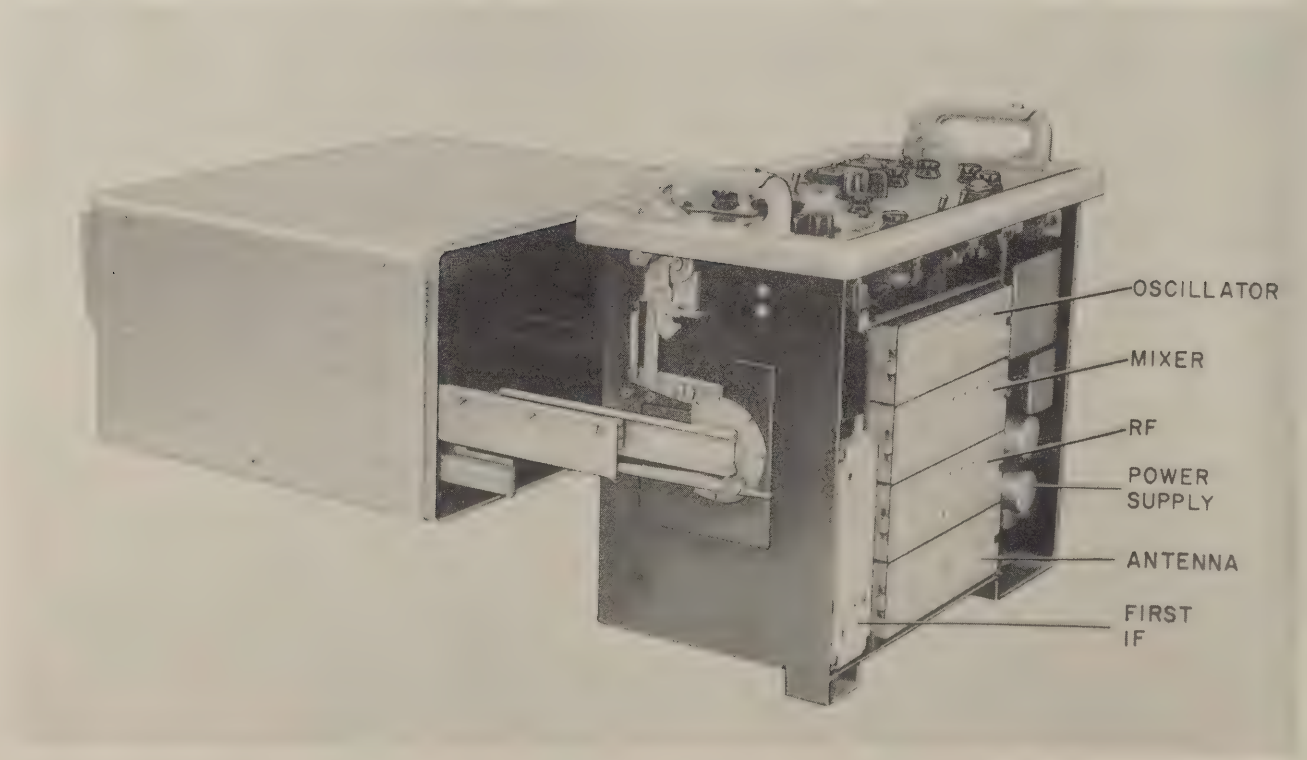


Figure 1–3. Subassemblies Accessible from Bottom of Chassis

b. EQUIPMENT AND PUBLICATIONS REQUIRED BUT NOT SUPPLIED.—Table 1–2 lists the equipment and publications required for operating or maintaining the receiver, but not supplied as part of the receiver.

c. SHIPPING DATA.—All equipment and publications are contained in one shipping container whose dimensions are 20-5/8-inches wide, 33-5/8-inches high, and 12-1/4-inches deep (4.92 cubic feet). The weight of the container 122.5 pounds.

d. ELECTRON TUBE COMPLEMENT.—Table 1–3 lists the electron tubes and semiconductors used in the receiver.

1–5. EQUIPMENT SIMILARITIES.

Radio Receiving Set AN/SRR–11A differs from the AN/SRR–11 in the following respects:

a. Mechanical filters are used in the AN/SRR–11A.

b. Crystal diodes are used in lieu of power tubes in the power supply of the AN/SRR–11A.

c. A Zener diode is used in lieu of a vacuum tube regulator in the power supply of the AN/SRR–11A.

TABLE 1–1. RADIO RECEIVING SET AN/SRR–11A, EQUIPMENT SUPPLIED

QUANT. PER EQUIP.	NOMENCLATURE		*OVERALL DIMENSIONS			*VOLUME	*WEIGHT
	NAME	DESIGNATION	HEIGHT	WIDTH	DEPTH		
1	Radio Receiver: tubes, semiconductors, and crystals in place.	R–439A/SRR–11	8-3/4	17-1/4	16-3/4	1.5	69
1	Set of connectors, clamps, and cable comprising:						
	1 connector	AN3106A–16S–5S					
	2 connectors	AN3106A–10SL–4S					
	1 connector	UG–88/U					
	1 connector	UG–21B/U					
	2 clamps and cable	AN3057–4					
	1 clamp and cable	AN3057–8					
	1 test cable assembly	CG–1101/SRR					
2	Technical manuals						
1	Maintenance standards book						
1	Operating instruction chart						
1	Performance standards sheet						

* Unless otherwise stated, dimensions are in inches, volume in cubic feet, weight in pounds.

TABLE 1–2. RADIO RECEIVING SET AN/SRR–11A, EQUIPMENT AND PUBLICATIONS REQUIRED BUT NOT SUPPLIED

QUANT. PER EQUIP.	NOMENCLATURE		REQUIRED USE	REQUIRED CHARACTERISTICS
	NAME	DESIGNATION		
1 or 2 as required	Headset	49507 or equivalent		600 ohms (nominal)
1 or 2 as required	Loudspeaker Amplifier	AM–215/U or equivalent	Optional for loudspeaker use	600 ohms (nominal)
1	Frequency Shift Converter, Audio Type	CV–89/URA–8A or equivalent	Teletype frequency shift	600 ohm input (nominal)
1	Antenna system			

SECTION 2
INSTALLATION

2-1. UNPACKING AND HANDLING.

Receivers are shipped with the chassis mounted in their cabinets and electron tubes in place. The tools required for unpacking are a pair of tin snips, a nail puller, a prying tool and a pen knife.

To unpack the receiver, set the crate as shown in figure 2-1, and cut the three steel bands binding the crate. Pull the nails securing the top of the crate and remove the contents as indicated in figure 2-1. Check all items in the crate against table 1-1. Inspect each item and report any damage to the proper authorities.

2-2. SITE LOCATION.

When selecting a site for the receiver, the following considerations should be made:

a. Enough space must be left at the rear of the chassis for cable connections.

b. Equipment must be placed so all front panel controls and indicators are accessible to the operator.

c. Equipment must be placed so the chassis may be tilted up or down for maintenance adjustment or alignment.

d. Equipment must be low enough for the chassis to be easily removed from the cabinet.

2-3. POWER REQUIREMENTS AND DISTRIBUTION.

The receiver can be operated from a 105-, 115-, or 125-volt, 50 to 60, or 400-cycle ac supply. Primary power is supplied to the receiver chassis via a power cable. Power links within the receiver must be adjusted for the proper voltage and frequency. (See figure 5-1.)

2-4. INSTALLATION REQUIREMENTS.

The receiver is intended for shipboard operation, and is designed for table-top installation without the use of shock mounts. The following paragraphs describe the procedures used to install the receiver in position and connect all signal and power cables. Procedures for cable fabrication are also included.

NOTE

The front of the equipment must overhang edge of mounting surface or a spacer must be inserted between the bottom of the cabinet and mounting surface so that flange of front panel will not scrape mounting surface when chassis is removed from or inserted into cabinet.

a. INSTALLATION PROCEDURES.—Install the receiver as follows:

(1) Raise two circular catches located near bottom of release bars. (See figure 2-2A.)

(2) Raise release bars on handles and slide chassis out of cabinet.

(3) Depress two chassis release levers located on sides of chassis. (See figure 2-2B.)

(4) Remove chassis from track on cabinet (support chassis and cabinet while removing chassis).

(5) Drill four 7/16-inch holes through mounting surface in accordance with figure 2-3 (allow at least three inches at back of cabinet for cable clearance).

(6) Insert bolts, lockwashers, and flatwashers, as shown in figure 2-3.

(7) Connect one end of a grounding braid to one mounting bolt. Connect the other end of the grounding braid to a suitable ground as directed in particular installation plan.

NOTE

If receiver is to be mounted so back of cabinet is close to a bulkhead, connect power input and output cables to the receptacles at rear of the cabinet before securing the receiver cabinet to the mounting surface. Leave a minimum space of two inches around the equipment, for ventilation.

(8) Fully extend two tracks on inside walls of receiver cabinet. (See figure 2-2B.)

(9) Lift chassis into position so rails at sides of chassis engage tracks in cabinet.

(10) Push chassis on tracks until chassis release lever clicks into position.

(11) Remove nylon cord which secures the lens arm assembly for shipping.

(12) Push the chassis the rest of the way into the cabinet.

(13) Lower release bars to lock chassis in cabinet. (See figure 2-2A.)

(14) Lower circular catches to lock release bars in position.

b. CABLING.—Run cables to the appropriate receptacles at the back of receiver to complete installation. (See figures 2-3 and 2-4.) These cables are not supplied with the equipment since the actual length varies with the installation. However, the required connectors and clamps are provided in a paper container packed with the receiver. These cables should be run as directly as possible from the external connections to the receiver, avoiding any sharp bends. Allow approximately six inches of slack in the cable at receiver end

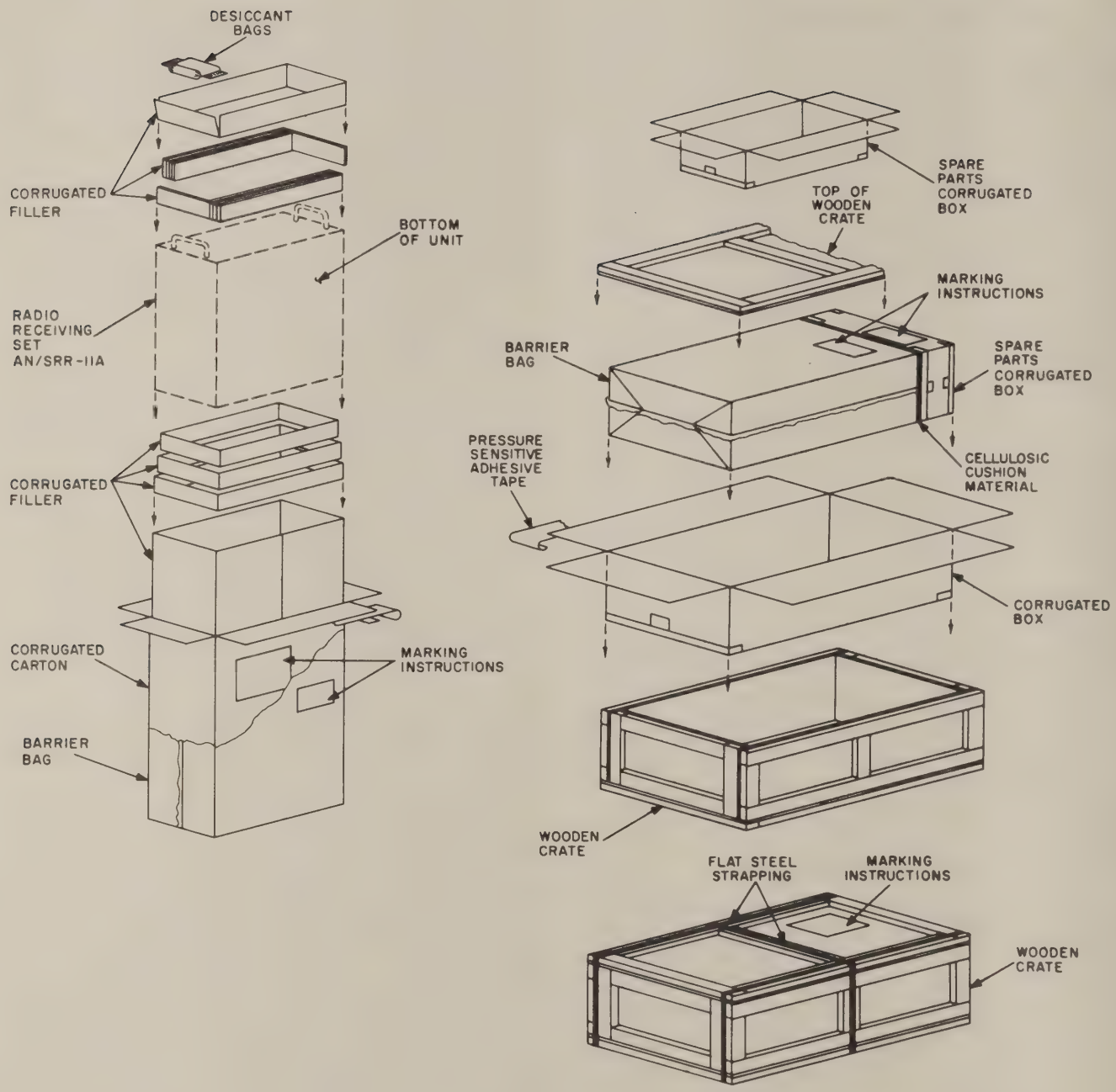


Figure 2–1. Packaging Diagram

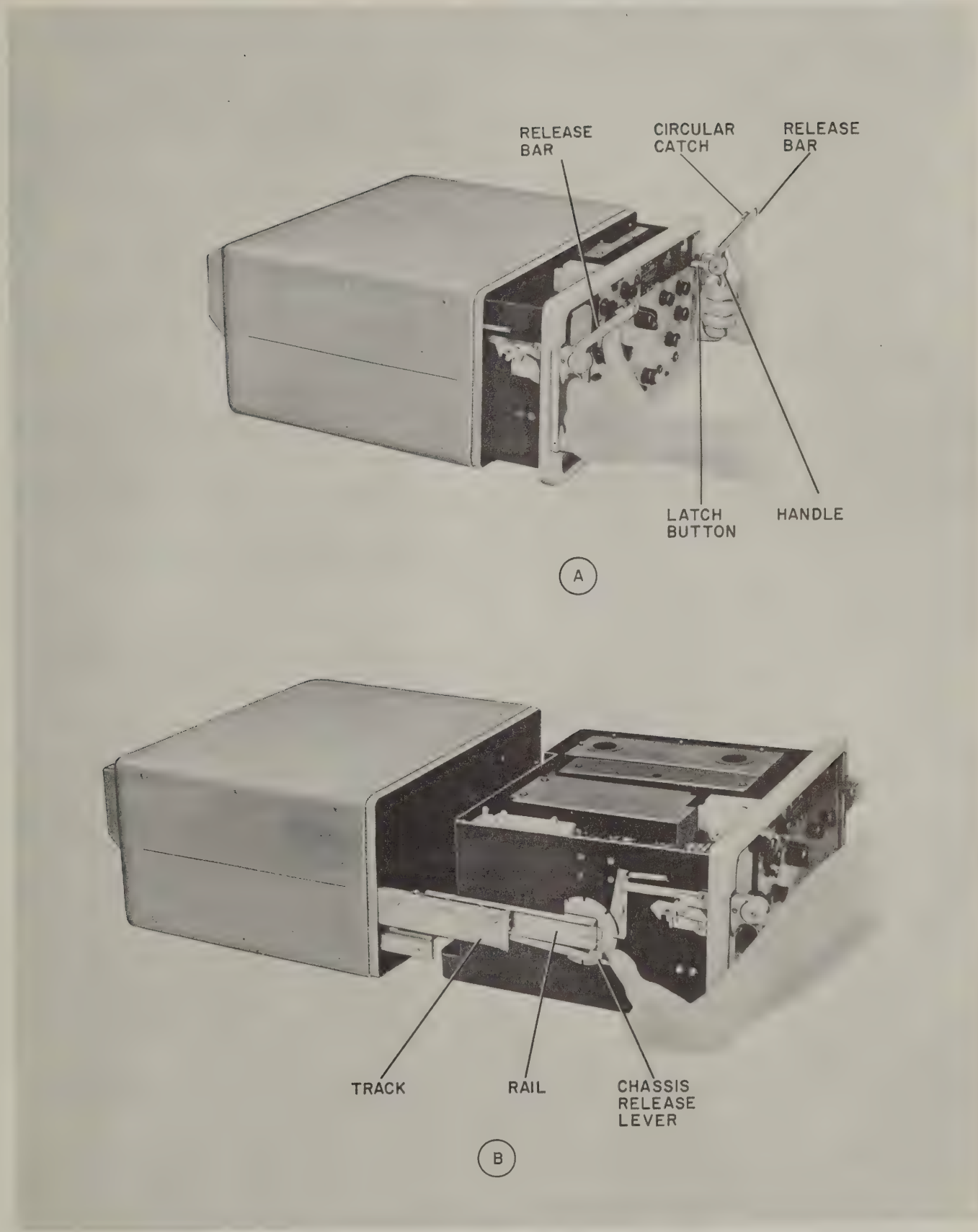


Figure 2-2. Removing Chassis from Cabinet

so cable connectors can be attached to the receptacles without pulling or binding at the connection. Tools needed for cable fabrication of these connectors are a pair of long nose pliers, pair of diagonal pliers, screwdriver (four-inch blade), soldering iron, solder, and a small knife.

(1) I-F CABLE.—The i-f cable requires a UG–88/U plug and a length of RG–58/U coaxial cable, or equivalent. Proceed as follows:

(*a*) Trim jacket 1/4 inch for RG–58/U cable, 5/16 inch for RG–59/U cable, or 7/16 inch for RG–71/U cable. (See figure 2–5.)

(*b*) Fray shield and strip inner dielectric 1/8 inch.

(*c*) Tin center conductor.

(*d*) Taper braid and slide nut, washer, gasket, and clamp over braid. Insert clamp so shoulder butts against end of cable jacket.

(*e*) With clamp in place, comb out braid, fold back smooth over clamp, and trim 3/32 inch from end.

(*f*) Slip male contact over inner conductor and butt against dielectric; solder male contact. (To prevent dielectric from swelling, be certain cable dielectric is not heated excessively.)

(*g*) Slide jack body over cable as far as possible.

(*h*) Slide nut, gasket, and washer into body; tighten nut with wrench.

CAUTION

Hold cable and jack body rigid when tightening nut.

(2) ANTENNA CABLE.—The antenna cable requires a UG–21B/U plug and a length of RG–12/U coaxial cable, or equivalent. Proceed as follows:

(*a*) Cut end of cable even.

(*b*) Remove 1/2 inch of vinyl jacket being careful not to nick braid. (See figure 2–6.)

(*c*) Fold back braid and bare 1/4 inch of center conductor being careful not to nick conductor.

(*d*) Taper braid and slide nut, washer, and gasket on vinyl jacket. Slide clamp on braid until it butts against vinyl jacket.

(*e*) With clamp in place, trim braid 3/16 inch from end.

(*f*) Fold braid over clamp.

(*g*) Tin center conductor using minimum amount of heat.

(*h*) Solder contact to center conductor making certain that back end of contact is flush with inner dielectric.

(*i*) Carefully slide jack body into place so that center conductor contact enters hole in insulator. Face of cable dielectric must fit flush against insulator. Properly tighten jack body and nut with wrenches.

CAUTION

Hold cable and jack body rigid when tightening nut to avoid breaking center conductor connection.

(3) POWER CABLE.—The power cable requires an AN3106A–16S–5S plug, an AN3057–8 clamp, and a length of MCOS–2 cable, or equivalent. Proceed as follows:

(*a*) Unscrew cable clamp from plug, being careful not to lose ferrule, rubber washer, or fiber gasket. (See figure 2–7.)

(*b*) Remove cable clamp cap by unfastening two clamp screws.

(*c*) Slip cable through cable clamp, fiber gasket, and rubber washer. Place threaded portion of clamp towards end of cable.

(*d*) Disassemble plug for soldering wires by unscrewing back shell. Slip cable through back shell and plug coupling ring (which is freed when the back shell is removed).

(*e*) Cut and strip cable and wires. Pre-tin each wire. Cut back shielding to within 1/2 inch of outer covering.

(*f*) Pre-tin braided shielding of cable.

(*g*) Solder wires to plug contacts (avoid excessive solder).

(*h*) Reassemble plug. (Cable shielding should show about 1/4 inch beyond assembled plug.)

(*i*) Slip ferrule over cable so that shielding is on side that is within connector housing.

(*j*) Solder shielding to ferrule being careful not to permit any solder near outer edge of ferrule.

(*k*) Push cable in so ferrule is up against connector shell rim.

(*l*) Position clamp, rubber washer, and fiber gasket; screw cable clamp body onto the back shell of plug.

(*m*) Reassemble cable clamp cap with two associated clamp screws and lock washers.

(4) AUDIO CABLE.—Each audio cable requires an AN3106A–10SL–4S plug, an AN3057–4 clamp, and a length of TTHFWA–11/2 cable, or equivalent. Fabrication instructions for these cables are identical to those of the power cable (refer to paragraph 2–4*b*(3)).

CAUTION

Before connecting the power cable, be certain that adjustments described in paragraph 2–5*a* have been made.

(5) EXTERNAL CONNECTIONS.—All cables are connected to the receiver as shown in figure 2–4. Connect the antenna cable to the ANT. receptacle at the back of the receiver and to the receiving antenna to be used. Connect the audio cable (or cables) to the AUDIO receptacle(s) at the back of the receiver and

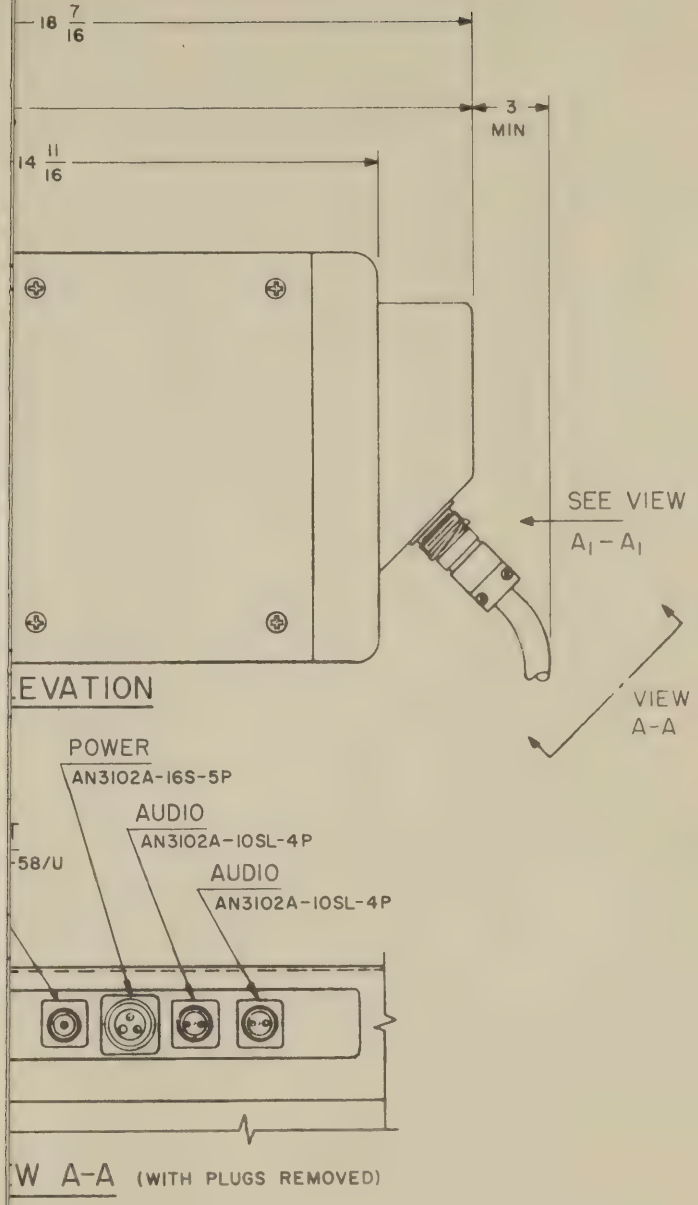


Figure 2–3. Outline Drawing

so cable connectors can be attached to the receptacles without pulling or binding at the connection. Tools needed for cable fabrication of these connectors are a pair of long nose pliers, pair of diagonal pliers, screwdriver (four-inch blade), soldering iron, solder, and a small knife.

(1) I-F CABLE.—The i-f cable requires a UG–88/U plug and a length of RG–58/U coaxial cable, or equivalent. Proceed as follows:

(*a*) Trim jacket 1/4 inch for RG–58/U cable, 5/16 inch for RG–59/U cable, or 7/16 inch for RG–71/U cable. (See figure 2–5.)

(*b*) Fray shield and strip inner dielectric 1/8 inch.

(*c*) Tin center conductor.

(*d*) Taper braid and slide nut, washer, gasket, and clamp over braid. Insert clamp so shoulder butts against end of cable jacket.

(*e*) With clamp in place, comb out braid, fold back smooth over clamp, and trim 3/32 inch from end.

(*f*) Slip male contact over inner conductor and butt against dielectric; solder male contact. (To prevent dielectric from swelling, be certain cable dielectric is not heated excessively.)

(*g*) Slide jack body over cable as far as possible.

(*h*) Slide nut, gasket, and washer into body; tighten nut with wrench.

CAUTION

Hold cable and jack body rigid when tightening nut.

(2) ANTENNA CABLE.—The antenna cable requires a UG–21B/U plug and a length of RG–12/U coaxial cable, or equivalent. Proceed as follows:

(*a*) Cut end of cable even.

(*b*) Remove 1/2 inch of vinyl jacket being careful not to nick braid. (See figure 2–6.)

(*c*) Fold back braid and bare 1/4 inch of center conductor being careful not to nick conductor.

(*d*) Taper braid and slide nut, washer, and gasket on vinyl jacket. Slide clamp on braid until it butts against vinyl jacket.

(*e*) With clamp in place, trim braid 3/16 inch from end.

(*f*) Fold braid over clamp.

(*g*) Tin center conductor using minimum amount of heat.

(*h*) Solder contact to center conductor making certain that back end of contact is flush with inner dielectric.

(*i*) Carefully slide jack body into place so that center conductor contact enters hole in insulator. Face of cable dielectric must fit flush against insulator. Properly tighten jack body and nut with wrenches.

CAUTION

Hold cable and jack body rigid when tightening nut to avoid breaking center conductor connection.

(3) POWER CABLE.—The power cable requires an AN3106A–16S–5S plug, an AN3057–8 clamp, and a length of MCOS–2 cable, or equivalent. Proceed as follows:

(*a*) Unscrew cable clamp from plug, being careful not to lose ferrule, rubber washer, or fiber gasket. (See figure 2–7.)

(*b*) Remove cable clamp cap by unfastening two clamp screws.

(*c*) Slip cable through cable clamp, fiber gasket, and rubber washer. Place threaded portion of clamp towards end of cable.

(*d*) Disassemble plug for soldering wires by unscrewing back shell. Slip cable through back shell and plug coupling ring (which is freed when the back shell is removed).

(*e*) Cut and strip cable and wires. Pre-tin each wire. Cut back shielding to within 1/2 inch of outer covering.

(*f*) Pre-tin braided shielding of cable.

(*g*) Solder wires to plug contacts (avoid excessive solder).

(*h*) Reassemble plug. (Cable shielding should show about 1/4 inch beyond assembled plug.)

(*i*) Slip ferrule over cable so that shielding is on side that is within connector housing.

(*j*) Solder shielding to ferrule being careful not to permit any solder near outer edge of ferrule.

(*k*) Push cable in so ferrule is up against connector shell rim.

(*l*) Position clamp, rubber washer, and fiber gasket; screw cable clamp body onto the back shell of plug.

(*m*) Reassemble cable clamp cap with two associated clamp screws and lock washers.

(4) AUDIO CABLE.—Each audio cable requires an AN3106A–10SL–4S plug, an AN3057–4 clamp, and a length of TTHFWA–11/2 cable, or equivalent. Fabrication instructions for these cables are identical to those of the power cable (refer to paragraph 2–4*b*(3)).

CAUTION

Before connecting the power cable, be certain that adjustments described in paragraph 2–5*a* have been made.

(5) EXTERNAL CONNECTIONS.—All cables are connected to the receiver as shown in figure 2–4. Connect the antenna cable to the ANT. receptacle at the back of the receiver and to the receiving antenna to be used. Connect the audio cable (or cables) to the AUDIO receptacle(s) at the back of the receiver and

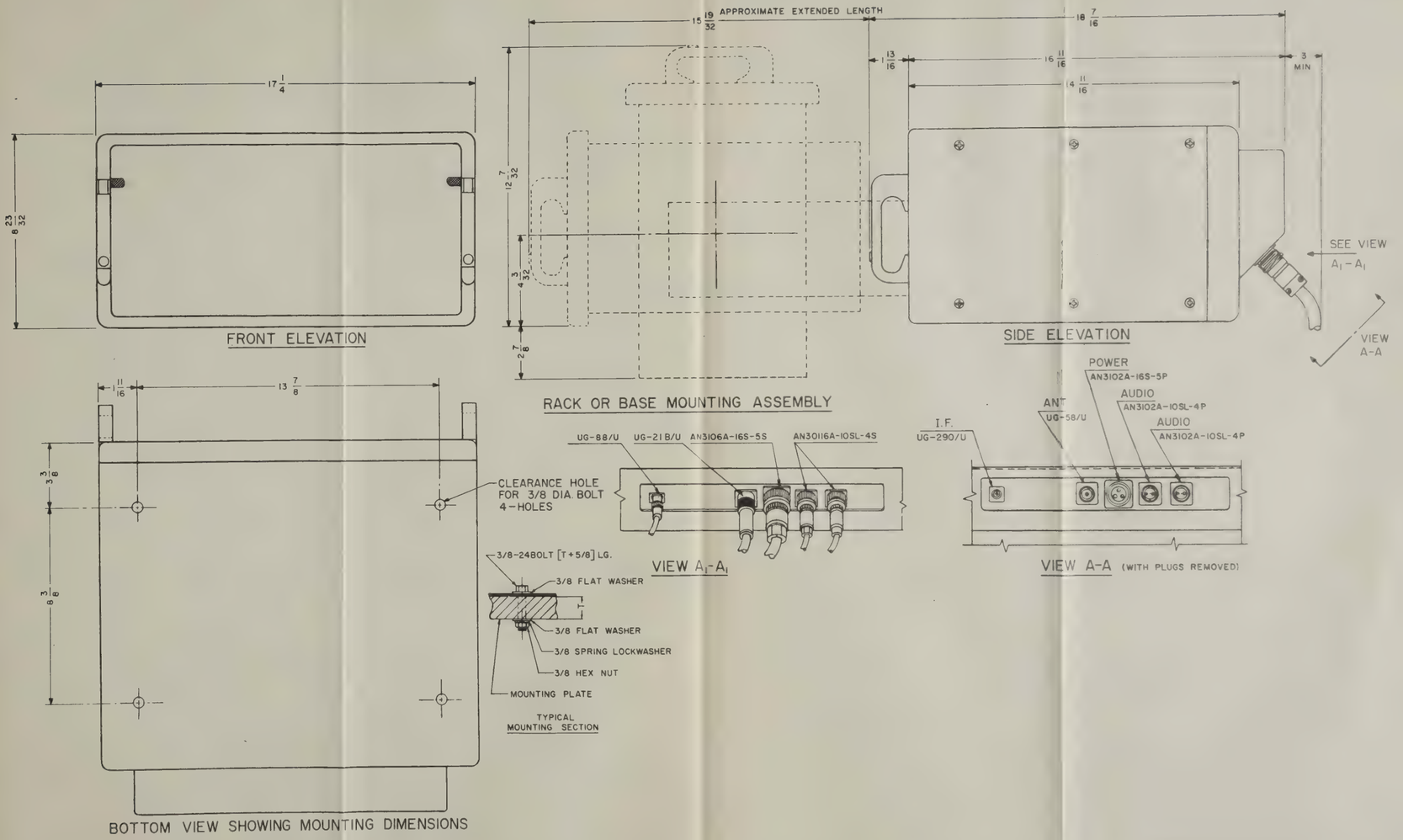


Figure 2-3. Outline Drawing

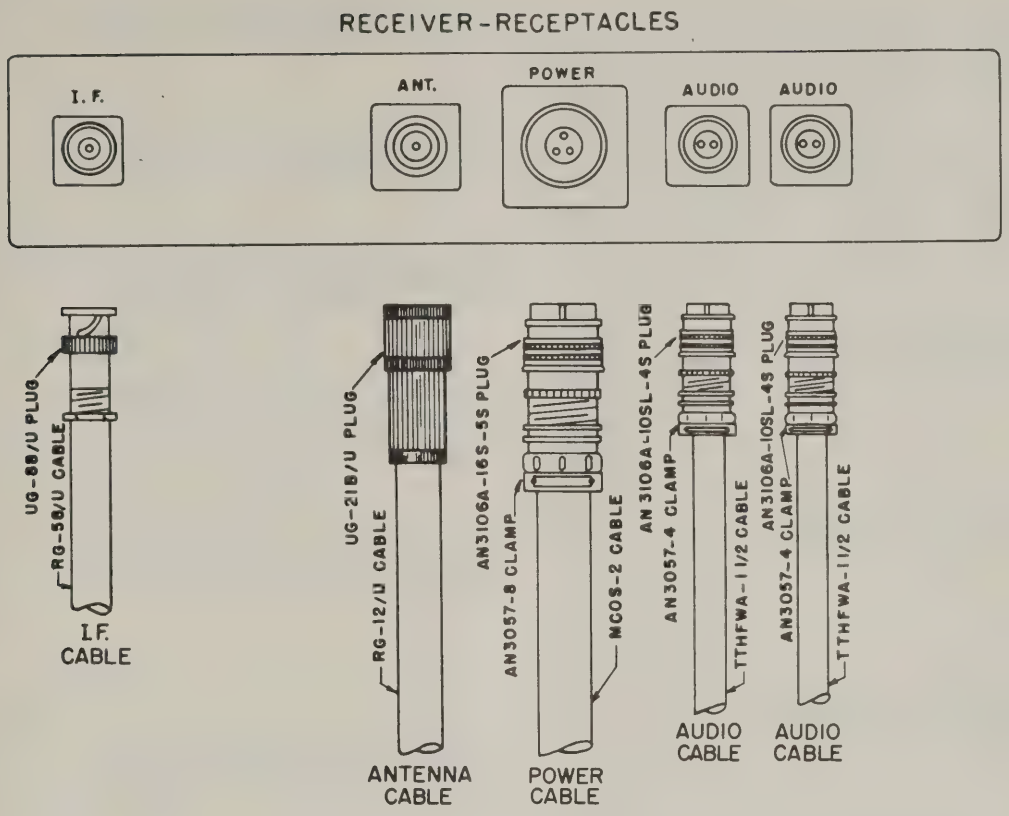


Figure 2-4. Cabling Diagram

to the loudspeaker, headset, or other associated audio-frequency equipment.

2-5. INSPECTION AND ADJUSTMENTS.

Before the receiver can be inspected or adjusted, it must be placed in servicing position. (See figures 1-2 and 1-3.) This is accomplished by pulling the chassis out of the cabinet until it reaches the safety stops, depressing the latch buttons on front panel (A, figure 2-2), and tilting the chassis 45 or 90 degrees up or down.

NOTE

Be certain the positioning mechanism locks in place before letting handles go.

a. PRIMARY TAP SETTINGS.—Set link O1601 on board E1601 in the power supply to the position that most nearly corresponds to the anticipated line voltage. Link board E1601 is accessible from the top of the chassis after the power supply cover plate has been removed. (See figure 2-8.) If receiver is to be operated from a 400-cycle supply, unsolder and remove the lead connected to pin 1 of T1601, and connect it to pin 6. Proceed with the following checks before placing the receiver in operation.

b. OUTPUT TRANSFORMER TAP SETTINGS.—Refer to the particular installation plan in use and check whether it calls for a grounded or ungrounded secondary tap (pin 6) of output transformer T1101; then check T1101 to see if it conforms to the installation plan. If it does not conform to the installation plan, remove or insert the grounding wire as necessary. The ground wire should be connected between pins 6 and 4 of T1101, to meet the requirements of the applicable installation plan.

c. MATCHING ANTENNA IMPEDANCE.—The receiver is shipped with links O101 and O102 in the antenna assembly set to operate with a high-impedance antenna. To match receiver input to a low-impedance antenna, place receiver in service position with bottom of chassis accessible. Location of the links in the antenna assembly is shown in figure 2-9. If a low-impedance antenna is used, reposition these links as follows:

(1) Loosen screws at terminals 9, 10, 11, and 12. (See figure 2-10.)

NOTE

The link positions shown (figure 2-10), by solid lines are for a high-impedance antenna.

(2) Remove link O101 from terminal 10 and connect to terminal 12.

(3) Connect link O102 to terminal 10.

(4) Tighten screws.

NOTE

Antenna link positions should correspond with link positions shown by dotted lines in figure 2-10.

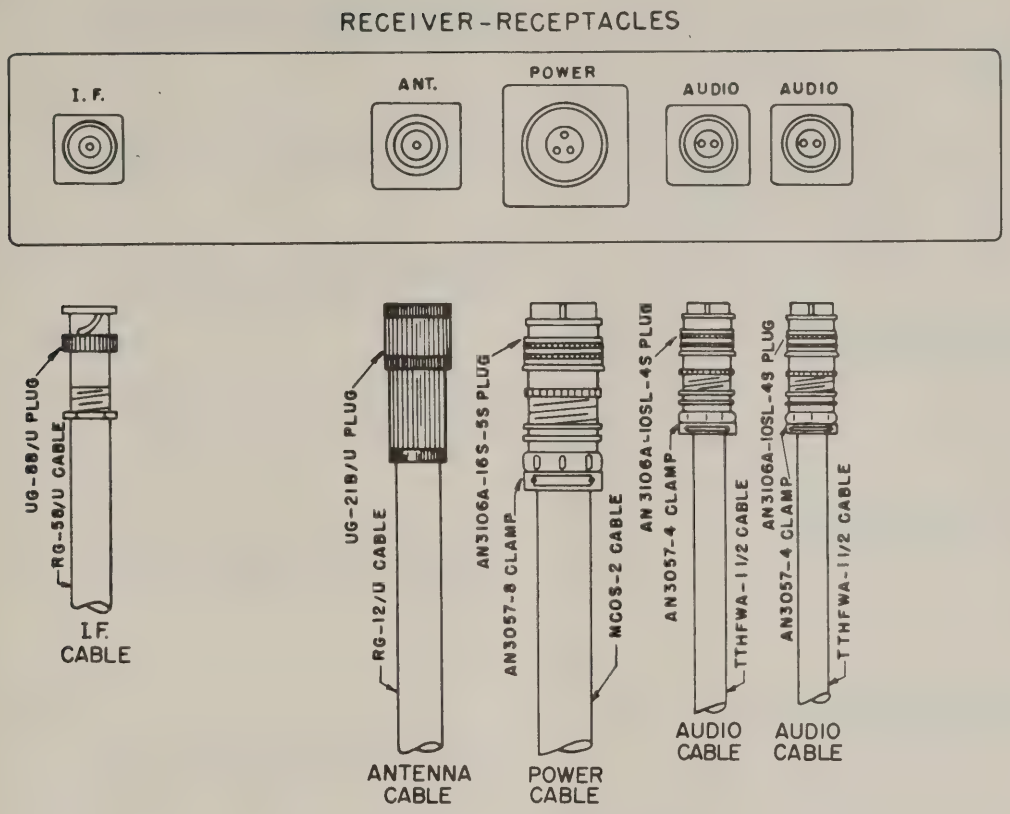


Figure 2–4. Cabling Diagram

to the loudspeaker, headset, or other associated audio-frequency equipment.

2–5. INSPECTION AND ADJUSTMENTS.

Before the receiver can be inspected or adjusted, it must be placed in servicing position. (See figures 1–2 and 1–3.) This is accomplished by pulling the chassis out of the cabinet until it reaches the safety stops, depressing the latch buttons on front panel (A, figure 2–2), and tilting the chassis 45 or 90 degrees up or down.

NOTE

Be certain the positioning mechanism locks in place before letting handles go.

a. PRIMARY TAP SETTINGS.—Set link O1601 on board E1601 in the power supply to the position that most nearly corresponds to the anticipated line voltage. Link board E1601 is accessible from the top of the chassis after the power supply cover plate has been removed. (See figure 2–8.) If receiver is to be operated from a 400-cycle supply, unsolder and remove the lead connected to pin 1 of T1601, and connect it to pin 6. Proceed with the following checks before placing the receiver in operation.

b. OUTPUT TRANSFORMER TAP SETTINGS.—Refer to the particular installation plan in use and check whether it calls for a grounded or ungrounded secondary tap (pin 6) of output transformer T1101; then check T1101 to see if it conforms to the installation plan. If it does not conform to the installation plan, remove or insert the grounding wire as necessary. The ground wire should be connected between pins 6 and 4 of T1101, to meet the requirements of the applicable installation plan.

c. MATCHING ANTENNA IMPEDANCE.—The receiver is shipped with links O101 and O102 in the antenna assembly set to operate with a high-impedance antenna. To match receiver input to a low-impedance antenna, place receiver in service position with bottom of chassis accessible. Location of the links in the antenna assembly is shown in figure 2–9. If a low-impedance antenna is used, reposition these links as follows:

(1) Loosen screws at terminals 9, 10, 11, and 12. (See figure 2–10.)

NOTE

The link positions shown (figure 2–10), by solid lines are for a high-impedance antenna.

(2) Remove link O101 from terminal 10 and connect to terminal 12.

(3) Connect link O102 to terminal 10.

(4) Tighten screws.

NOTE

Antenna link positions should correspond with link positions shown by dotted lines in figure 2–10.

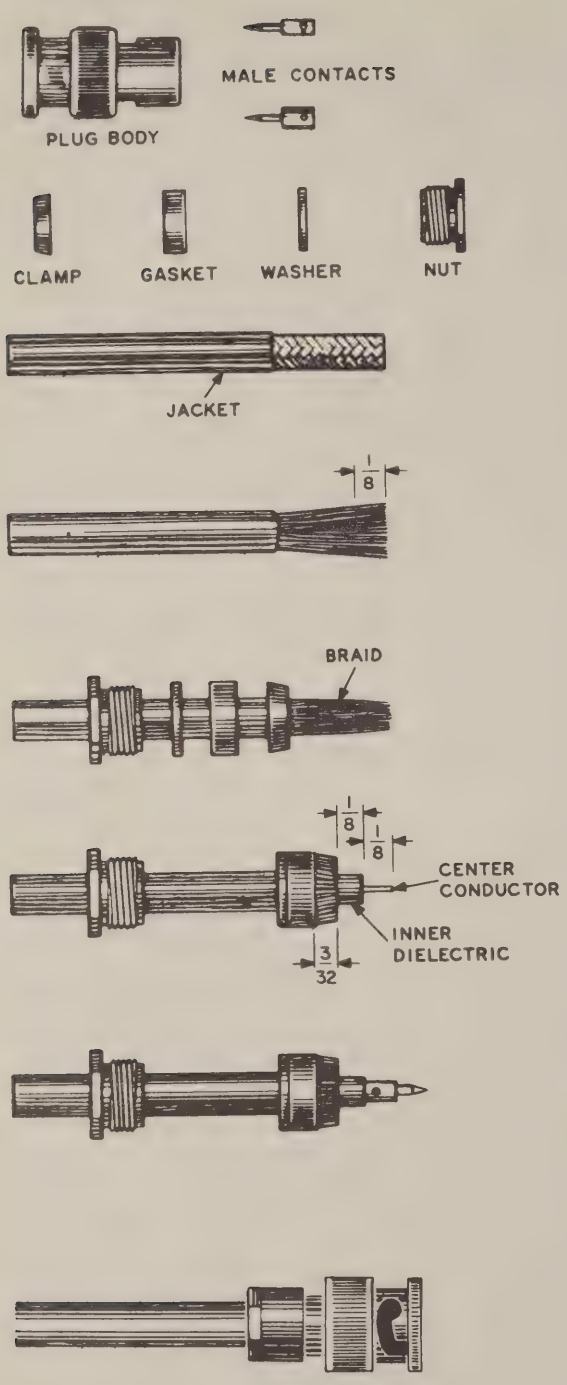


Figure 2–5. Cable Fabrication, UG–88/U Plug

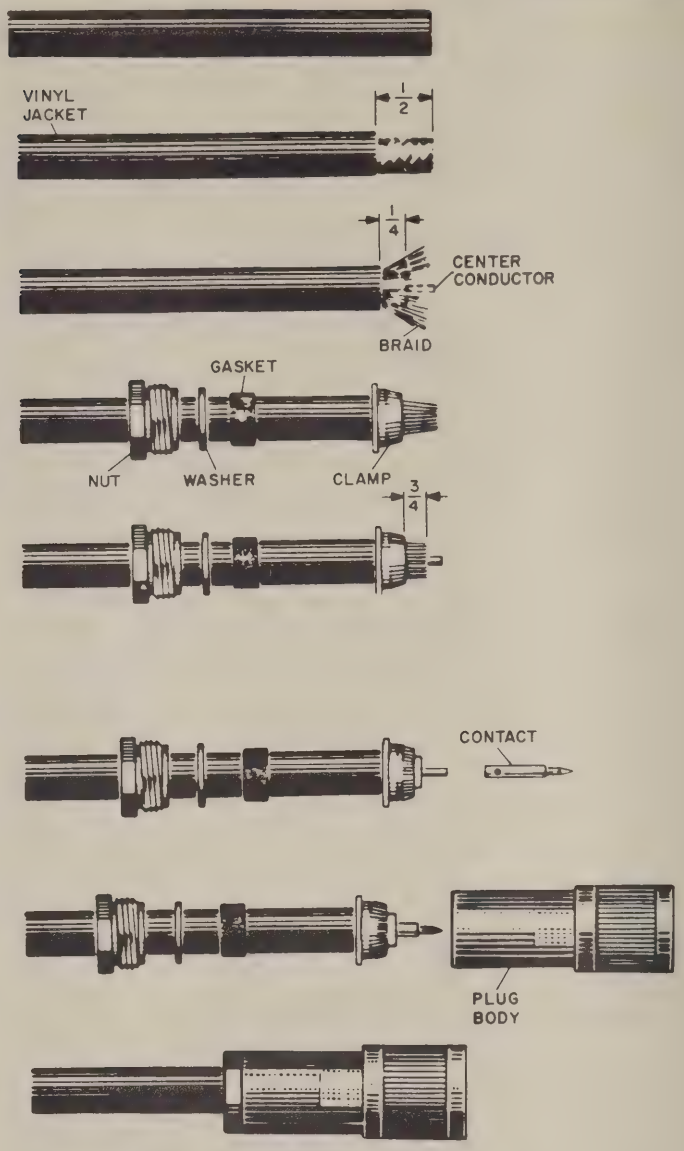


Figure 2–6. Cable Fabrication, UG–21B/U Plug

d. COMMON ANTENNA CONNECTION.—Any combination of AN/SRR–11A, –12, or –13A receivers can be operated from a common antenna. Open microswitch S102, in the antenna preamplifier of the AN/SRR–11A by placing the ANT. COMP. control to the HIGH position. (Such common antenna operation will result in less effective receiver performance.)

e. OPERATING TEST IN SERVICING POSITION.—With the receiver chassis in the servicing position, connect test cable assembly type CG–1101/SRR between receptacle at the back of the receiver chassis and receptacle on the back wall of the receiver cabinet. With the test cable connected as described, all circuits are connected and the receiver can be operated in this position for servicing.

f. GROUNDING THE CABINET.—Connect a grounding braid to the underside of a mounting bolt and connect the other end to a convenient ground. (Refer to the particular installation plan in use for details of this connection.)

WARNING

Remove the 115-volt a-c power from the receiver by disconnecting the power plug or supply switch before connecting test cable assembly CG–1101/SRR.

g. ENERGIZING THE RECEIVER.—The receiver can be operated in either the servicing position or

normal operating position. The receiver is energized by placing POWER ON-OFF switch in the ON position.

b. FREQUENCY SHIFT (F.S.K.) OPERATION.—Energize the receiver, set RECEPTION control to F.S.K. and tune to an F.S.K. signal. Adjust tuning control for maximum deflection on the TUNING meter. Follow instructions for the frequency shift converter used. Adjust the FREQ. VERNIER control in accordance with operating instructions for the frequency shift converter.

2-6. INTERFERENCE REDUCTION.

Filters have been incorporated within the receiver to keep inter-equipment interference to a minimum.

2-7. PREPARATION FOR RESHIPMENT.

To prepare the receiver for reshipment, proceed as follows:

a. Place POWER ON-OFF switch in OFF position.

b. Remove all cables from receptacles at the rear of the receiver.

c. Raise two circular catches located near bottom of handles. (See figure 2-2A.)

d. Raise release bars on handles and slide chassis out of cabinet.

e. Depress two chassis release levers located on sides of chassis. (See figure 2-2B.)

f. Remove chassis from track on cabinet.

g. Secure the lens arm assembly (55, figure 6-11) to the bracket (54, figure 6-11) with nylon cord.

h. Remove nuts, bolts, and washers securing cabinet to mounting surface.

i. Remove cabinet and place on bench.

j. Fully extend two tracks on inside walls of cabinet.

k. With cabinet held firmly on bench, lift chassis into position so rails at sides of chassis engage tracks in cabinet.

l. Push chassis on tracks until chassis release lever clicks into position. Continue pushing chassis into cabinet.

m. Lower release bars to lock chassis in cabinet. (See figure 2-2A.)

n. Lower circular catches to lock release bars in position.

o. Place receiver, cables, and publications listed in table 1-1 in a corrugated carton. (See figure 2-1.) Use paper filler as necessary.

p. Seal carton with adhesive tape.

q. Place carton in moistureproof barrier bag.

r. Seal moistureproof barrier bag with waterproof tape.

s. Place moistureproof barrier bag and contents into a second corrugated box. Use paper filler as necessary.

t. Seal the second corrugated box using waterproof tape.

u. Bind the wooden crate with three steel bands.

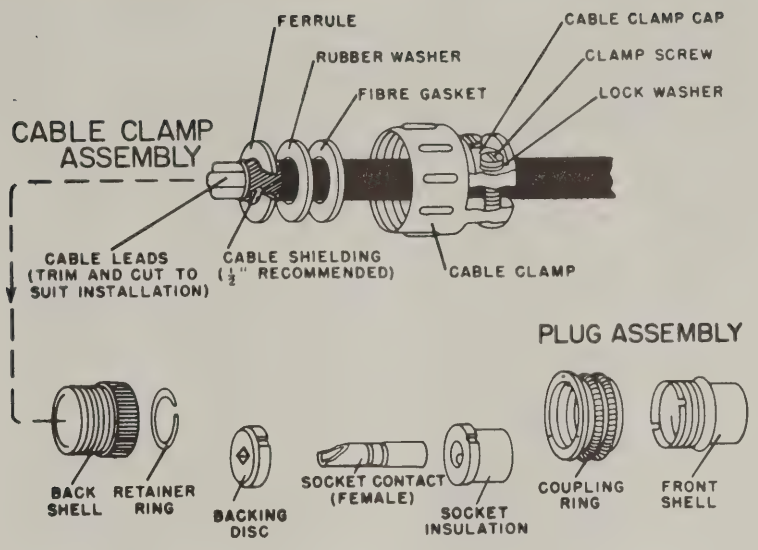


Figure 2-7. Cable Fabrication, AN31064 Plugs

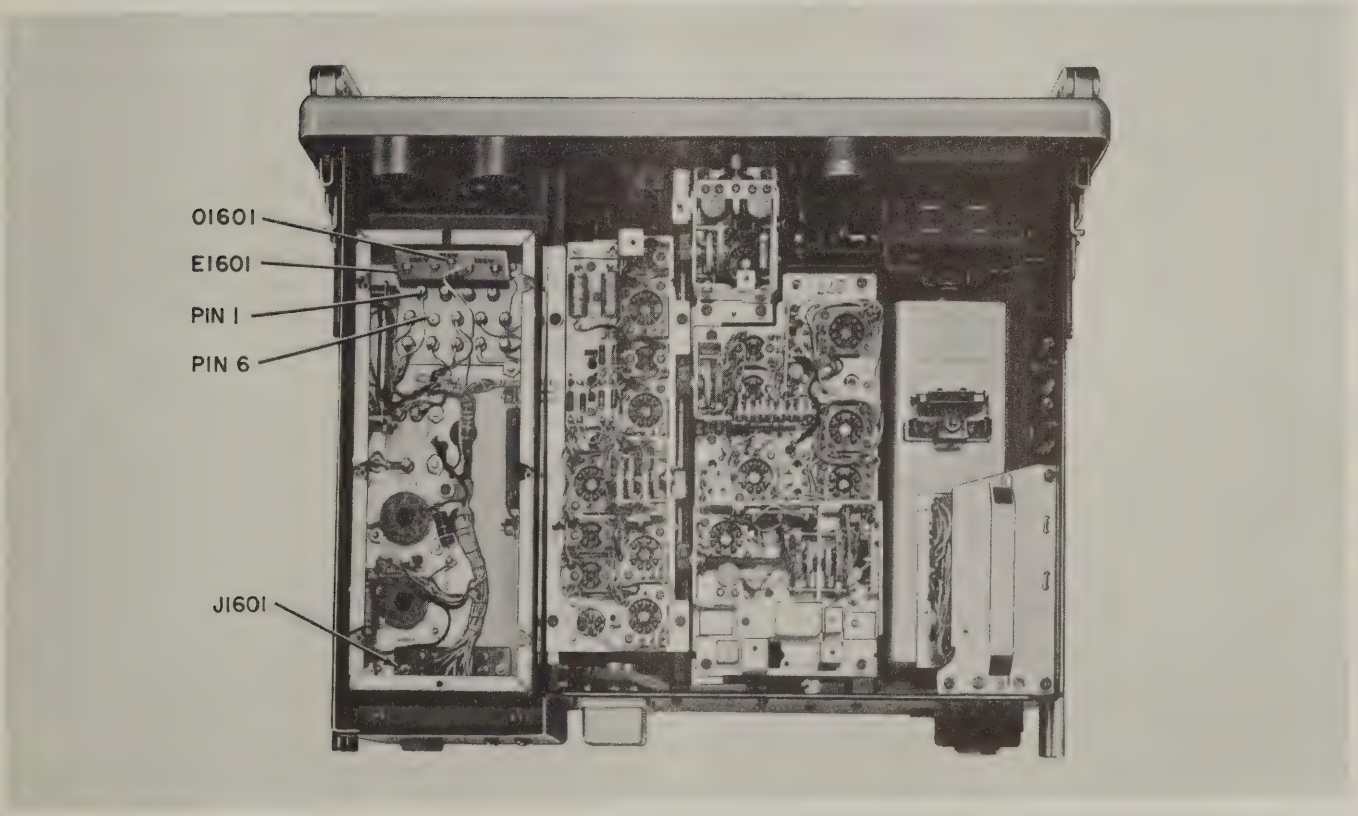


Figure 2-8. Initial Adjustment Points on Top of Chassis

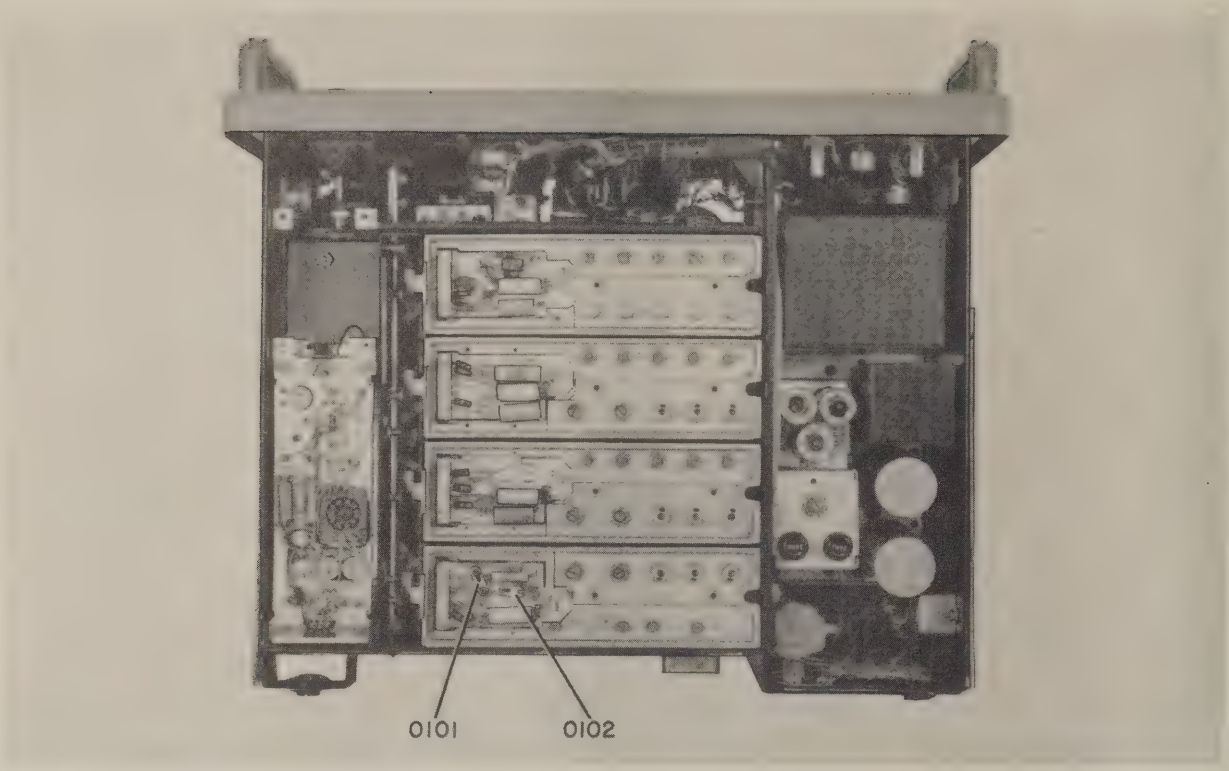


Figure 2–9. Initial Adjustment Points on Bottom of Chassis

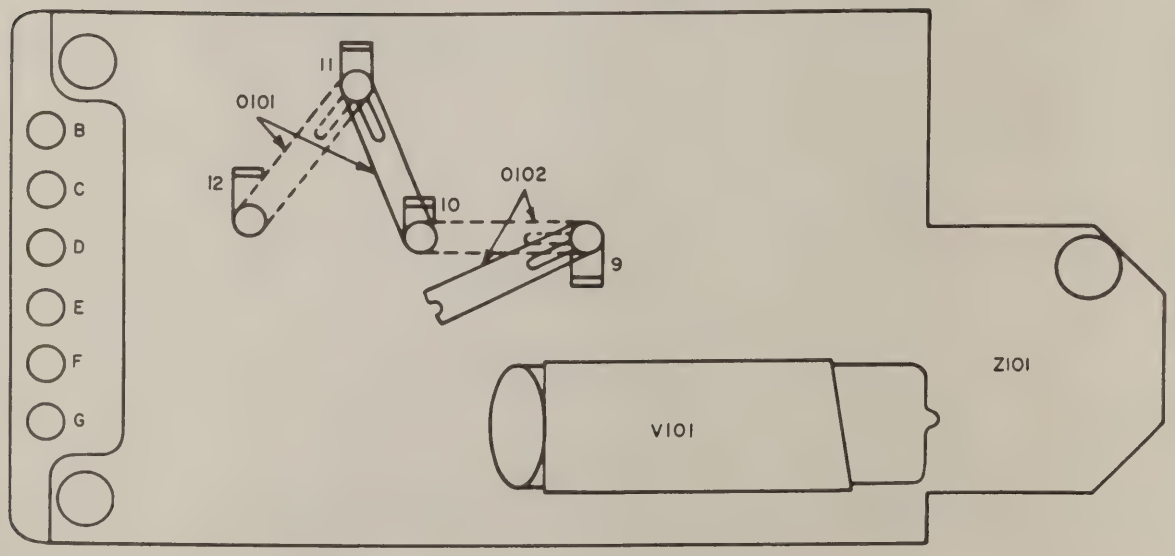


Figure 2–10. Antenna Matching Links

SECTION 3
OPERATOR'S SECTION

3-1. FUNCTIONAL OPERATION.

Radio Receiving Set AN/SRR-11A receives three modes of transmission over a frequency range of 14 to 600 kc. The received signals, unmodulated cw (A1), modulated cw (A2), or frequency shift (F.S.K.) are selected by the RECEPTION control on the front panel. The overall frequency range of the receiver is divided into five bands and is controlled by the band selector switch. Tuning within each band is accomplished by the tuning control. The audio output of the receiver may be monitored by headphones and/or a speaker amplifier.

The basic receiver operates as a double superheterodyne on two of the five frequency bands and as a single superheterodyne on the remaining three bands. Two r-f stages are provided for a high degree of sensitivity, selectivity, and image rejection ahead of the first mixer and oscillator. The first i-f amplifier serves as the second converter and its output feeds the second i-f amplifier.

During F.S.K. and A1 reception, an unmodulated signal is applied to the BFO-mixer stage from the beat frequency oscillator (BFO). The input signal and the beat oscillator signal beat together to produce an audio signal. During A2 operation, the audio output signal is obtained from a detector, amplified by the audio stages, and applied to the headphone and/or the speaker amplifier.

3-2. OPERATING PROCEDURES.

a. DESCRIPTION OF CONTROLS.—All operating controls and indicators necessary for the operation of the receiver are mounted on the front panel of the receiver. (See figure 3-1.) These controls and indicators are listed, with their functions, in table 3-1.

b. SEQUENCE OF OPERATION.—The sequence of operation consists of turning the equipment on, selecting the desired emission, tuning in a signal, regulating the output, and shutting off the equipment. Additional operations required to adequately tune a signal are the use of meters, logging scales, and crystal controlled calibrator.

(1) STARTING EQUIPMENT.—To apply power to the receiver, proceed as follows:

(*a*) Make certain receiver chassis is firmly in cabinet.

(*b*) Place POWER ON-OFF switch in ON position.

(*c*) Adjust dial illumination by operating DIM control.

NOTE

If dial lamp does not light, set LAMP knob to SPARE position.

(*d*) Place CAL. ON-OFF switch in OFF position.

(*e*) Set ADD DECIBELS switch to the +20 position.

(*f*) Place STANDBY-OPERATE switch in OPERATE position.

(*g*) Plug headset into PHONES jack.

NOTE

Use headset similar to Navy type 49507.

(2) TUNING A SIGNAL.—When a desired station is recorded on the logging dial, reset the two scales to the received figure. If a station is to be tuned for the first time, proceed as follows:

(*a*) Select appropriate band of frequencies using band selector switch.

(*b*) Turn GAIN and OUTPUT controls clockwise until background noise is heard.

(*c*) Calibrate receiver at frequency check point nearest to desired signal frequency.

(*d*) Set desired frequency under hairline index on projection screen by means of tuning control.

(*e*) Adjust tuning control for maximum signal as indicated on the TUNING meter.

(*f*) Turn the ANT. COMP. control until signal is the loudest or the tuning meter indication is a maximum.

NOTE

This control has the most effect at the high end of each frequency band.

(*g*) Adjust FREQ. VERNIER for desired audio beat for A1 reception. This control is not to be used for A2 reception.

(3) SELECTING EMISSION TYPES.—The tuning procedures differ, depending upon the position of the RECEPTION control. Paragraphs 3-2*b*(3) (*a*) through (*d*) describe any deviations to the basic tuning procedure for different types of reception:

(*a*) F.S.K.—When the receiver is supplying signals to an i-f type frequency shift converter (similar to Navy Model CV-57/URR), tune the receiver to the desired frequency (by means of the tuning control), and adjust the ANT. COMP. control for maximum signal. When the receiver is supplying audio signals to a frequency shift converter (similar to

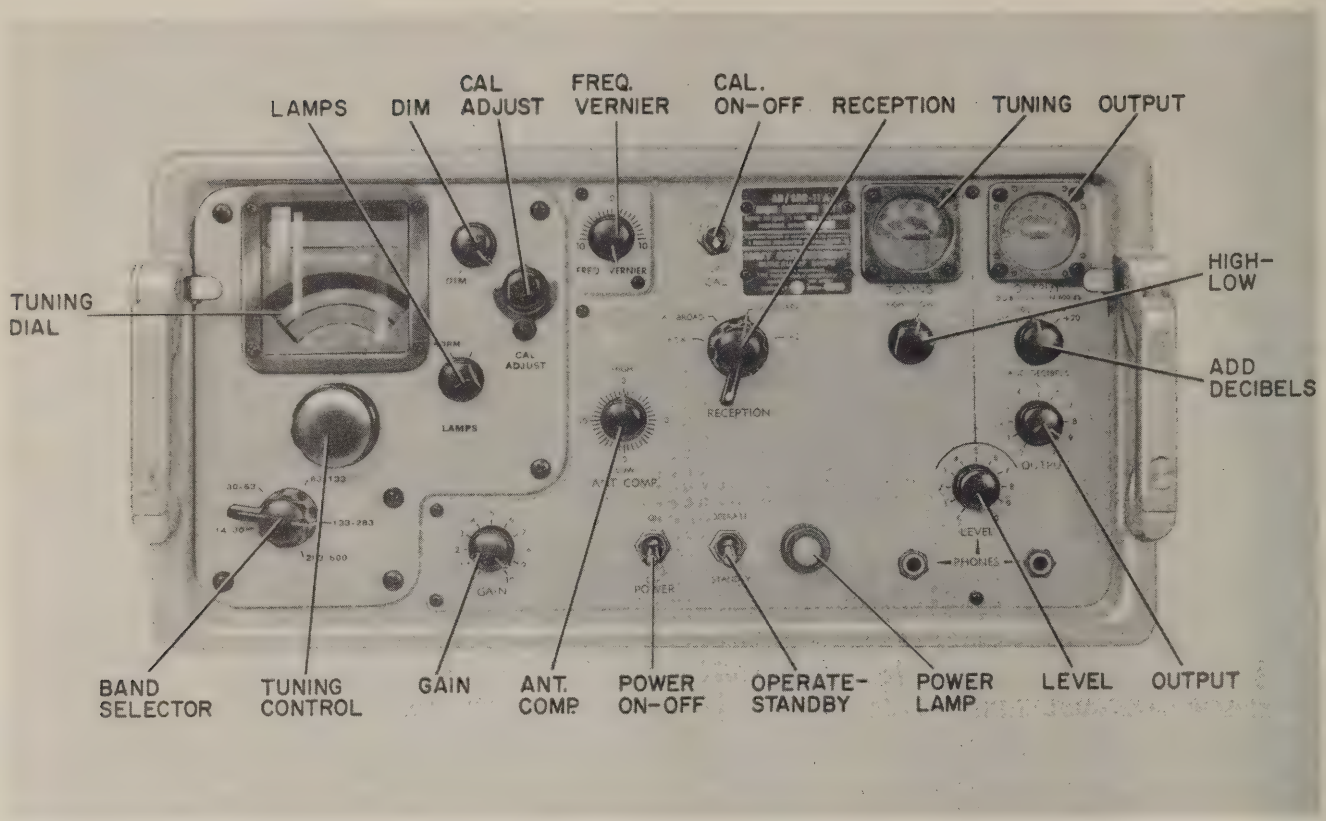


Figure 3–1. Operating Controls and Indicators

TABLE 3–1. RADIO RECEIVING SET AN/SRR–11A, OPERATING CONTROLS AND INDICATORS

CONTROL OR INDICATOR	REFERENCE DESIGNATION	FUNCTION
Band selector	S101	Selects one of five tuning ranges of receiver.
Tuning control	C251	Adjusts receiver to desired frequency.
Tuning dial		Frequency setting is projected onto a translucent screen. Linear scale below projection dial is used for logging station settings.
LAMPS switch	S3601	Connects spare lamp into circuit if lamp normally lighting dial fails.
DIM control	R3601	Controls intensity of dial lamp.
CAL ADJUST control		Sets projection dial after desired checkpoint frequency has been zeroed.
FREQ. VERNIER control	C1309	Varies pitch of beat note when RECEPTION switch is set in F.S.K., A1 BROAD, or A1 SHARP position.
CAL. ON-OFF switch	S252	Provides frequency check points when in ON position.
RECEPTION switch	S1001, S1002, S1003, S1101, and S1301	F.S.K. position: Selects circuits for frequency shift reception when suitable converter is connected to receiver. A beat note is provided. A1 BROAD position: Normal setting for reception of unmodulated cw signals. A beat note is provided. A1 SHARP position: Increases selectivity of receiver when receiving unmodulated cw signals. A beat note is provided. A2 position: Provides for reception of modulated cw signals.

TABLE 3-1. RADIO RECEIVING SET AN/SRR-11A, OPERATING CONTROLS AND INDICATORS (Cont.)

CONTROL OR INDICATOR	REFERENCE DESIGNATION	FUNCTION
TUNING meter	M251	Indicates current at output of detector circuit. Meter is used in conjunction with HIGH-LOW switch.
HIGH-LOW switch	S254	When held in high position, range of TUNING meter is decreased for more accurate low current readings. Switch is spring loaded and normally in LOW position.
OUTPUT meter	M252	Indicates power output level directly in decibels. Meter is used in conjunction with ADD DECIBEL switch.
ADD DECIBELS switch	S255	Provides attenuation for OUTPUT meter circuit at: +20 db position; used for very strong output signals. +10 db position; used for strong output signals. 0 db position; used for weak output signals. −10 db position; used for momentary reading of weak output signals.
OUTPUT control	R257	Controls volume of receiver.
LEVEL control	R258	Controls volume of input to headsets.
Power lamp	I251	Lamp lights when +125 volts dc is applied to circuit.
OPERATE-STANDBY switch	S253	When in STANDBY position, +125 volts dc is removed from first r-f amplifier plate and screen.
POWER ON-OFF switch	S251	When in ON position, primary power is applied to equipment.
ANT. COMP. control	S102-C103	Adjusts tuning of antenna preamplifier to compensate for variation in antennas.
GAIN control	R251	Controls gain of r-f and i-f amplifiers.

Navy Model CV-89A/URA-8A), tune the receiver to the desired frequency; then adjust the OUTPUT and FREQ. VERNIER controls, as required, for operation of the frequency shift converter. When the receiver is applying audio frequency signals to a facsimile frequency shift converter (similar to CV-172/U), tune the receiver to the desired frequency for maximum indication on the TUNING meter; then adjust OUTPUT and FREQ. VERNIER controls, as required, for operation of the frequency shift converter.

(*b*) A1 BROAD.—The A1 BROAD position is used for cw signals. To tune in a station, adjust the GAIN control to the point of loudest signal and lowest background noise, and the OUTPUT control for the desired volume. Use the LEVEL control to regulate headphone level. Adjust the FREQ. VERNIER for a convenient audio note.

(*c*) A1 SHARP.—The A1 SHARP position is used to eliminate adjacent signals that interfere with desired station signal. Adjust controls as described for the A1 BROAD position.

(*d*) A2.—Adjust the tuning control for a maximum indication on the TUNING meter. Adjust the GAIN control for loudest signal and lowest background noise; then adjust OUTPUT control for desired volume.

(4) USE OF METERS.—The following paragraphs give a detailed procedure for using the front panel meters.

(*a*) TUNING METER.—As a station is tuned in, the TUNING meter reads up scale. When TUNING meter is below 1/4 scale on the LOW setting of the HIGH-LOW switch, hold switch in HIGH position and readjust tuning knob for an up-scale indication on the TUNING meter.

CAUTION

Never hold HIGH-LOW switch in HIGH position when TUNING meter is at or near full scale LOW position of switch.

(*b*) OUTPUT METER.—When reading output power, turn ADD DECIBELS switch from +20 to +10 and add 10 db to OUTPUT meter reading (e.g., OUTPUT meter reads −3, the actual power output is −3 +10 or +7 db). If OUTPUT meter reads on lower left hand part of scale, put ADD DECIBELS switch in 0 position and read OUTPUT meter directly. If OUTPUT meter still reads low, hold ADD DECIBELS switch in −10 position, and subtract 10 db from reading (e.g., if the OUTPUT meter reads +5, actual output power is +5 −10 or −5 db). The −10 db position of the ADD DECIBELS switch is spring-loaded. Thus, the switch automatically returns to the 0 position when released.

CAUTION

Return ADD DECIBELS switch to the +20 db position, except when measuring output level.

(5) LOGGING SCALES.—Two movable scales and one fixed index immediately below the projection dial, are used for logging the dial setting of received stations. The logging dial provides a quick means of resetting the receiver to the point where a station has previously been received. To use the logging dial, calibrate the projector (paragraph 3–2*b*. (6) below); then tune the receiver to the desired station. To record the settings of the two movable scales, use the index mark on the middle segment of the logging dial (e.g., if the top scale reads between 200 and 300 and the bottom scale reads 63, the setting of the logging dial is 263). By resetting this figure (263) on the logging dial, a previously received station can be returned quickly. The logging dial should always be set for clockwise rotation of the tuning knob.

NOTE

The logging dial is not affected by the CAL ADJUST control.

(6) CRYSTAL CONTROLLED CALIBRATION.—The crystal controlled calibrator provides frequency check points at 10 kc intervals throughout the tuning range of the receiver. This feature permits the numerical setting of the projector dial to be adjusted to agree with the frequency of received signals. To calibrate the tuning dial, proceed as follows:

(*a*) Place CAL. ON-OFF switch in ON position.

(*b*) Set tuning dial at nearest calibration marker on the projection dial.

NOTE

The calibration points are designated by an inverted V on the frequency scale.

(*c*) Rock tuning dial slightly on both sides of chosen frequency until a zero-beat note is obtained.

(*d*) Loosen thumbscrew holding CAL ADJUST knob and turn CAL ADJUST knob until nearest calibration marker is under hairline on projection screen.

(*e*) Tighten thumbscrew over CAL ADJUST knob.

NOTE

If the beat note is not located within 1/3 of the distance between calibration markers, or if beat note cannot be brought to coincidence by use of the CAL ADJUST knob, report the condition to your supervisor.

(7) SHUTTING OFF THE EQUIPMENT.—To turn off the receiver, place the POWER ON-OFF switch in the OFF position.

3–3. SUMMARY OF OPERATING PROCEDURES.

The following steps summarize the steps necessary to tune the receiver.

a. Apply power to receiver. (Refer to paragraph 3–2*b*. (1).)

b. Position RECEPTION control for desired type of emission. (Refer to paragraphs 3–2*b* (3) and 3–2*b* (4).)

c. Tune receiver to desired frequency. Refer to paragraphs 3–2*b* (2), 3–2*b* (5) and 3–2*b* (6).)

d. If necessary, calibrate tuning dial.

3–4. OPERATOR'S MAINTENANCE.

a. ROUTINE CHECK.—Table 3–2 lists routine checks to be performed by the operator to reduce failure time. When trouble is indicated that cannot be cleared up by performing the procedures outlined in paragraph 3–4*b*, report the condition to your supervisor for correction. These routine checks should be made each time the receiver is placed in operation. If the receiver is in continuous service, these checks should be made daily.

b. EMERGENCY MAINTENANCE. — Emergency maintenance procedures consist of replacing defective fuses and indicator lamps. Although these procedures are normally performed by a technician, an operator may replace these parts during emergency conditions. Table 3–2 lists some visual checks that can be made to determine whether any of the parts are defective. The following paragraph outlines the procedure for replacing a defective fuse.

(1) REPLACING FUSES.—If dial lamps and power lamps do not light, or, if the receiver is inoperative, the fault may be a blown fuse. The two 1-ampere fuses are located on the power supply subassembly, toward the rear, and are accessible from the bottom of the main chassis. (See figure 3–2.) To replace blown fuses follow the procedure outlined below:

CAUTION

Never replace a fuse with one of a higher rating unless continued operation of the equipment is more important than probable damage. If a fuse burns out immediately after replacement, do not insert a second fuse until the fault has been corrected.

(*a*) Slide chassis out of cabinet.
(*b*) Tilt chassis so bottom is accessible.
(*c*) Replace blown fuse.
(*d*) Replace chassis in cabinet.

c. ROUTINE MAINTENANCE.—Routine maintenance consists of replacing parts of the receiver that do not affect its normal operation. The procedures for removing these parts are contained in paragraphs (1) and (2).

(1) REPLACING POWER LAMP.—To replace the power lamp, proceed as follows:

(*a*) Unscrew jeweled housing on front panel.

TABLE 3-2. ROUTINE CHECK CHART

WHAT TO CHECK	HOW TO CHECK	REMARKS
Dial lamps	With power applied, rotate DIM control to vary intensity of lamp. If lamp does not light, place LAMPS switch in SPARE position.	If DIM control does not vary intensity of lamp, report condition to your supervisor. If neither dial lamp lights, check primary power and fuses F1601 and F1602. (See figure 3-2.)
Power lamp	Power lamp should light when power is applied.	If lamp does not light, replace it.
OUTPUT meter	Read signal strength.	Failure of meter to read on 0 db position of ADD DECIBELS switch may indicate aging tubes in audio amplifier, or trouble in OUTPUT meter circuit. Report condition to your supervisor.

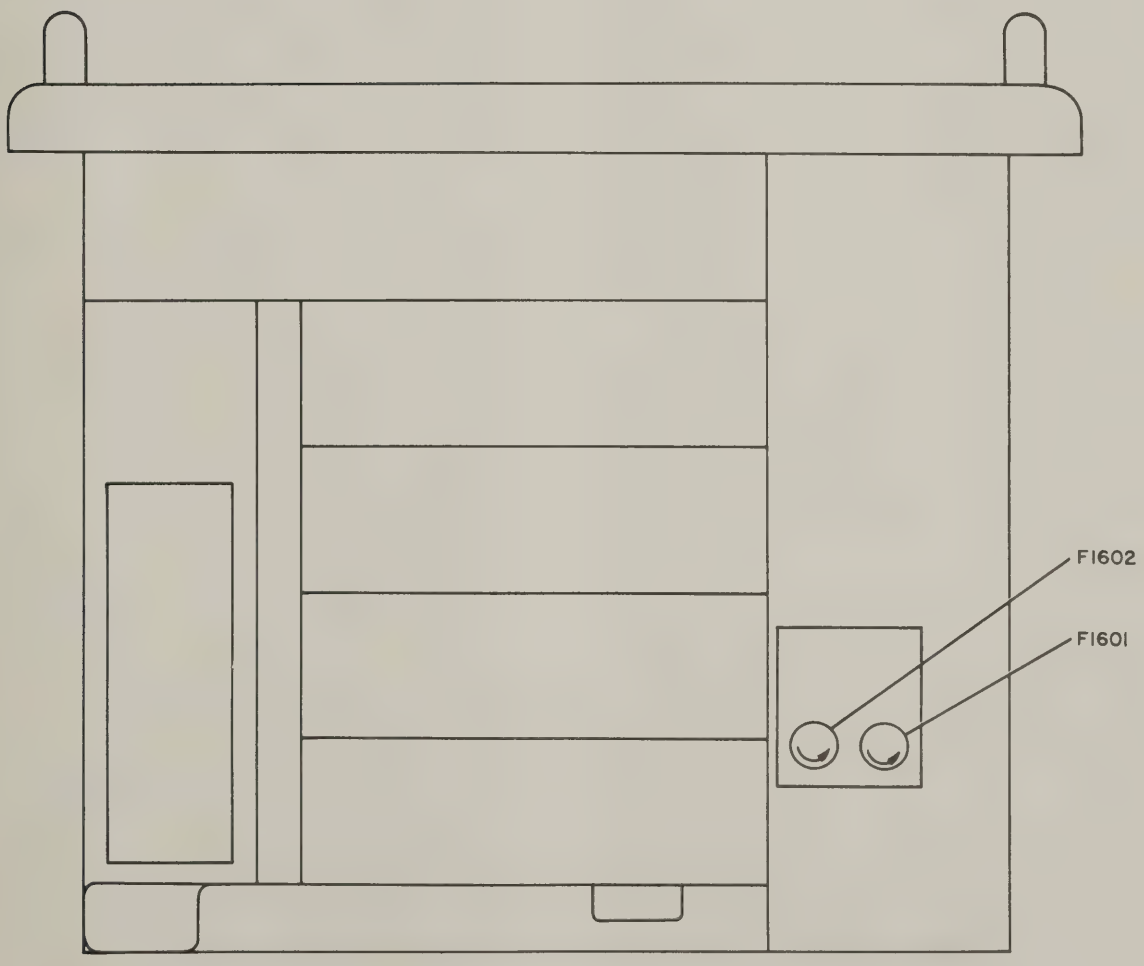


Figure 3-2. Location of Fuses for Operator-Maintenance

(*b*) Depress and rotate lamp 1/4-turn counterclockwise.

(c) Depress new lamp in holder and rotate 1/4-turn clockwise.

NOTE

Before inserting lamp, line up bayonet pins.

(*d*) Replace jeweled housing.

(2) REPLACING DIAL LAMPS.—Dial lamps are accessible from the top of the chassis. To remove dial lamps, proceed as follows:

(*a*) Pull chassis out of cabinet and tilt so top of chassis is accessible.

(*b*) Loosen the two recessed screws on dial light cover.

(*c*) Remove dial light cover.

(*d*) Replace defective bulb.

(*e*) Replace dial light cover and tighten the two recessed screws.

(*f*) Replace chassis in cabinet.

SECTION 4
PRINCIPLES OF OPERATION

4-1. OVERALL FUNCTIONAL DESCRIPTION.

The input to the receiver, is applied to mixer V151 through antenna preamplifier V101 and r-f amplifier V126. (See figure 4-1.) GAIN control R251A permits the gain of V101 and V126 to be varied when it is necessary to increase or decrease receiver sensitivity. The signal in mixer V151 is heterodyned with the signal from the local oscillator V201. A band selector switch selects the frequency range of V101, V126, V151 and V201. The resultant output of mixer V151 is applied to either the first i-f or second i-f, depending upon the position of switches S701 and S702.

The output frequency of mixer V151 on bands 2, 3, and 5 is 200 kilocycles. When either band 1 or 4 is selected by the band selector switch, mixer output is only 60 kc. Thus, for these bands, an extra frequency conversion stage is required so that input to the second i-f is 200 kc. This converter, V701 is part of the first i-f amplifier.

When the band selector switch is set to either band 1 or band 4, the 60-kc output of mixer V151 goes through S701 (controlled by the band selector switch) to band pass filter Z702 which passes the desired frequencies while stopping undesired frequency components. The desired signals are then applied to the converter section of the first i-f amplifier. The first i-f amplifier acts as a 140 kc oscillator and converter. Thus the resultant output frequency applied to the rotor of RECEPTION switch S1001 is 200 kc. If the band selector switch is selecting bands 2, 3, or 5, the output of the mixer is 200 kc. With the band selector switch in any of these positions, the 200 kc output of the mixer is applied directly to the rotor of S1001.

The signal present at the rotor of S1001 is applied to second i-f amplifiers V1001, V1002, and V1003 through either sharp filter Z1015A or medium filter Z1015B. The filter to be used is determined by the position of the RECEPTION switches S1001 and S1002. When the RECEPTION switch is placed into the F.S.K., A1 BROAD or A2 position, the signal is applied through medium filter Z1015B; for the A1 SHARP position, sharp filter Z1015A is used. The signal at the output of the selected filter is amplified by second i-f amplifiers V1001, V1002, and V1003.

The output of second i-f amplifier V1003 is applied to diode detector V1005, beat frequency oscillator (BFO) mixer V1004, and second cathode follower V1007. The output of V1007, in turn, may be applied to an externally connected frequency shift converter. When the RECEPTION switch is in either of the A1 positions or in the F.S.K. position, one section of S1003 grounds the input of noise limiter V1101 and disconnects the output of the diode detector. Switch S1301 applies B+ to the BFO.

The output of the BFO is heterodyned with the output of the second i-f amplifier in the BFO MIXER. A second section of S1003 couples the resultant output of the BFO mixer to first audio amplifier V1102 through S1101A. The signal is applied directly to V1102 for A1 inputs; for F.S.K. reception, output of the BFO mixer is applied to V1102 through OUTPUT control R257B which varies the input to the audio stages.

For A2 signal reception, output of diode detector V1005 is applied to the first audio amplifier via S1003, noise limiter V1101, and S1101A. Noise limiter V1101 limits the amplitude of noise transients resulting in less signal interference. Switch S1301 removes B+ from the BFO so no heterodyning takes place in the BFO mixer. Although an input is still applied to the BFO mixer, S1003 prevents the output of this stage from being applied to the first audio amplifier.

The first audio amplifier output is applied directly to silencer diode V1103 when RECEPTION switch (S1101B) is placed into either the F.S.K. A1 BROAD, or A2 position. If the A1 SHARP position is selected, the signal is first applied to band-pass filter Z1110 via the contacts of S1101B for additional filtering. Additional contacts of S1101B route the filtered signal to silencer diode V1103.

NOTE

Silencer diode V1103 is included to make the a-f amplifier subassembly identical and interchangeable with the a-f amplifier subassembly in Radio Receiving Set AN/SRR-13. The silencer function is not used in the AN/SRR-11A.

Output of V1103 passes through second audio amplifier V1105 and is applied to series limiter V1106 and V1107. The series limiters maintain a uniform output level during the reception of A1 or A2 signals.

The signal from the series limiters is amplified by power amplifier V1109 to a power level sufficient to drive the associated audio line and/or the headphones. The output signal from V1109 is coupled to the audio line and headsets by transformer T1101 via jacks J1701, J1702, and J265 and J266. OUTPUT meter M252

monitors the output level of the receiver. The range of this meter is controlled by ADD DECIBELS switch S255.

Crystal calibrators V1401 and V1402 permit the main tuning dial to be accurately calibrated throughout the tuning range. When CAL ON-OFF switch S252 is placed in the ON position the calibrator generates a basic frequency of 50 kc which synchronizes a 10-kc multivibrator to provide frequency check points at 10-kc intervals. These signals are applied to the mixer through the r-f amplifier. By obtaining a zero beat at the selected check frequency, the dial calibration may be exactly adjusted to that frequency.

4–2. CIRCUIT DESCRIPTION.

a. ANTENNA INPUT CIRCUIT.—The antenna input circuit consists of two impedance matching links, band selector switch S101, and input transformers for each of the five bands. (See figure 4–2.) The antenna matching links adapt the input circuit so antennas with capacitance from 30 to 5000 micromicrofarads may be used.

When antenna links O101 and O102 are set for a low impedance antenna, the antenna input is applied across the primary of transformer T101, T102, T103, T104, or T105 through capacitor C102, link O101, and contacts of S101A. Link O102 grounds the secondary centertap through resistor R101, R102, R103, R104, or R105, contacts of S101A, and capacitors C107 and C106. When these links are set for a high impedance antenna, the input is applied to the secondary centertap through C102, O101, C107, and contacts of S101A and R101, R102, R103, R104, or R105. The primary of transformer T101, T102, T103, T104, or T105 is not in the circuit in the high impedance antenna connection.

The high side of the secondary is applied to the grid of antenna preamplifier V101 through contacts of S101A. The secondary of T101, T102, T103, T104, or T105 is tuned throughout the selected band by tuning control capacitor C251D. This capacitor is placed across the selected transformer via contacts of S101A.

ANT. COMP. switch S102 and capacitor C103 compensates for variations in antenna capacitance by trimming the effect of C251D. When the capacitor is varied, through the first 180-degrees of rotation, switch S102 automatically shorts input capacitor C102 and the trimmer compensates for antenna capacitance only. During the other 180-degrees of rotation, C102 is in series with the antenna and reduces the effect of high-capacitance antennas on the tuned circuits.

Wafer B of S101 is used to short out transformers used for ranges lower than the selected range. In figure 4–2, S101 is selecting transformer T101 which is associated with band 1. Since this is the lowest range, S101B is not used. If, however, S101 is selecting band 3, S101B moves two positions clockwise. The high end of the secondary winding is then shorted to the low end via contact 15 of S101B. Since the low end of each transformer is shorted together, the high end of T102 (associated with band 2) is also shorted to the low end through contact 14 of S101B. This system of shorting transformers avoids any possible interaction between transformers not used and transformers in use.

b. ANTENNA PREAMPLIFIER, R-F AMPLIFIER, AND MIXER CIRCUIT. This circuit (figure 4–3) consists of two stages of transformer coupled r-f amplification and a mixer stage to produce intermediate frequency. Switches S126 and S151, which are controlled by the band selector switch, are shown in the band 1 position.

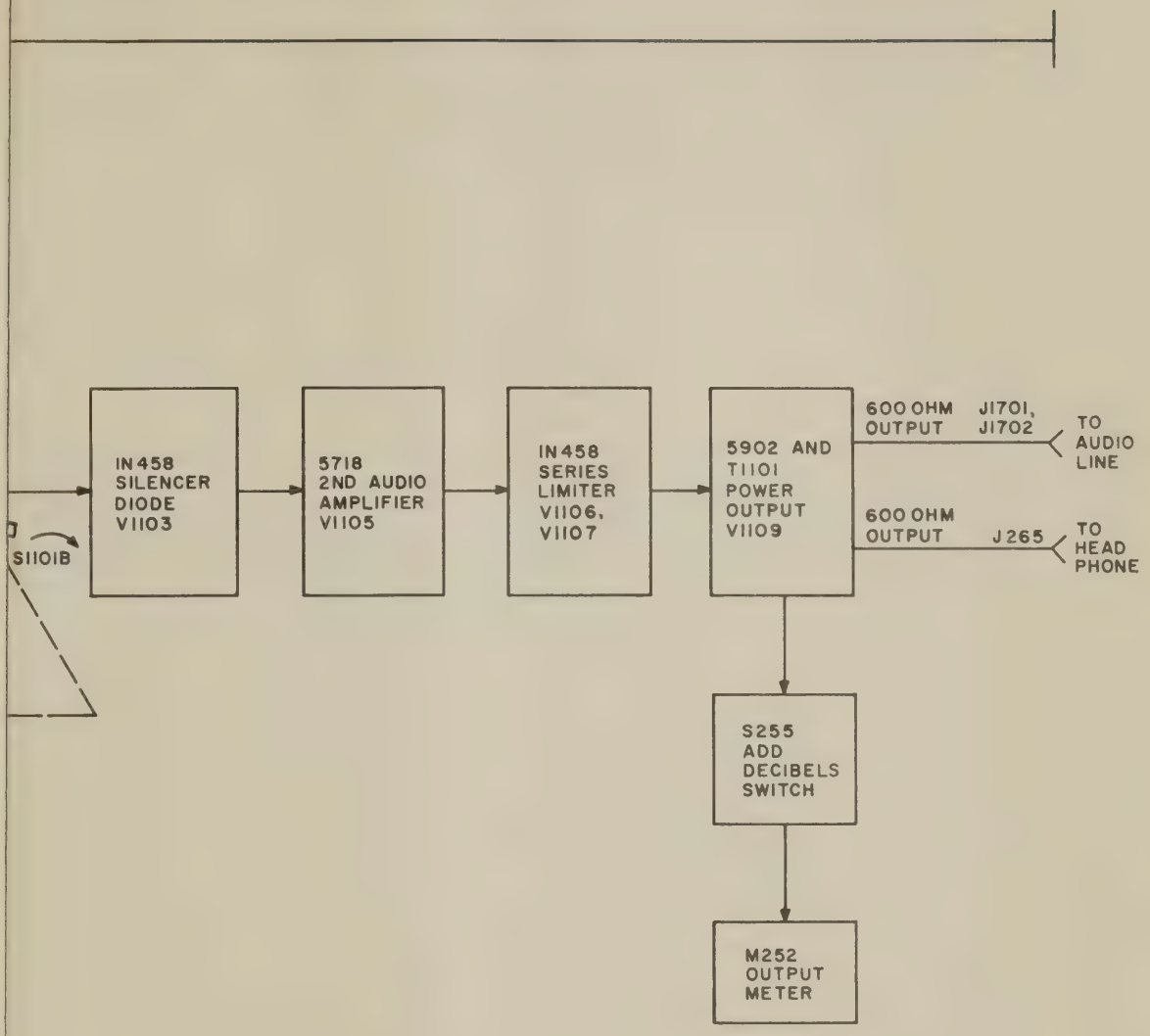
Input to the control grid of first r-f amplifier V101 is received from the antenna input circuit. The r-f signal is amplified in V101, and applied to second r-f amplifier V126 through contacts of band selector switch S126A (section 1), coupling transformer T126, and sections 2 and 3 of S126A. Transformer T126 is the coupling transformer associated with band 1. Three sections of S126A and two sections of S126B are used to switch this transformer into the circuit.

Section 1 of S126A connects the plate of V101 to the high side of the primary of T126. A second input applied to the high side of T126 is the output from the crystal calibrator when CAL. ON-OFF switch S252 is placed in the ON position. To avoid having two inputs to V126, B+ voltage for V101 is routed through S252. Thus, when this switch is in the ON position, V101 is inoperative and only the crystal calibrator signal is applied to V126.

In band 1, section 1 of S126B opens the circuit of capacitor C139. However, in bands 2 through 4, section 1 places capacitor C139 across the primary of the transformer associated with this particular band. This is possible since the low side of the T126 primary is common to the low sides of the primaries of transformers associated with bands 2 through 5.

The secondary tap of T126 is connected to the grid of V126 via section 3 of S126A. Section 2 of S126A places tuning capacitor C251C across the secondary of T126. This stage is also provided with a shorting switch (section 2 of S126B) which shorts out the transformers associated with the bands below the selected band. Operation of this switch is similar to operation of the shorting switch contained in the antenna input circuit and discussed in paragraph 4–2*a*.

Gain of r-f amplifiers V101 and V126 is controlled by GAIN control R251A in the MGC circuit. GAIN



NOTE:

1. UNLESS OTHERWISE SPECIFIED; RESISTANCE VALUES ARE IN OHMS.
2. SWITCHES S701, S702, S1001, S1002, S1003, S1101 AND S1301 ARE ALL CONTROLLED BY THE RECEPTION SWITCH ON THE FRONT PANEL.

Figure 4–1. Functional Block Diagram

monitors the output level of the receiver. The range of this meter is controlled by ADD DECIBELS switch S255.

Crystal calibrators V1401 and V1402 permit the main tuning dial to be accurately calibrated throughout the tuning range. When CAL ON-OFF switch S252 is placed in the ON position the calibrator generates a basic frequency of 50 kc which synchronizes a 10-kc multivibrator to provide frequency check points at 10-kc intervals. These signals are applied to the mixer through the r-f amplifier. By obtaining a zero beat at the selected check frequency, the dial calibration may be exactly adjusted to that frequency.

4–2. CIRCUIT DESCRIPTION.

a. ANTENNA INPUT CIRCUIT.—The antenna input circuit consists of two impedance matching links, band selector switch S101, and input transformers for each of the five bands. (See figure 4–2.) The antenna matching links adapt the input circuit so antennas with capacitance from 30 to 5000 micromicrofarads may be used.

When antenna links O101 and O102 are set for a low impedance antenna, the antenna input is applied across the primary of transformer T101, T102, T103, T104, or T105 through capacitor C102, link O101, and contacts of S101A. Link O102 grounds the secondary centertap through resistor R101, R102, R103, R104, or R105, contacts of S101A, and capacitors C107 and C106. When these links are set for a high impedance antenna, the input is applied to the secondary centertap through C102, O101, C107, and contacts of S101A and R101, R102, R103, R104, or R105. The primary of transformer T101, T102, T103, T104, or T105 is not in the circuit in the high impedance antenna connection.

The high side of the secondary is applied to the grid of antenna preamplifier V101 through contacts of S101A. The secondary of T101, T102, T103, T104, or T105 is tuned throughout the selected band by tuning control capacitor C251D. This capacitor is placed across the selected transformer via contacts of S101A.

ANT. COMP. switch S102 and capacitor C103 compensates for variations in antenna capacitance by trimming the effect of C251D. When the capacitor is varied, through the first 180-degrees of rotation, switch S102 automatically shorts input capacitor C102 and the trimmer compensates for antenna capacitance only. During the other 180-degrees of rotation, C102 is in series with the antenna and reduces the effect of high-capacitance antennas on the tuned circuits.

Wafer B of S101 is used to short out transformers used for ranges lower than the selected range. In figure 4–2, S101 is selecting transformer T101 which is associated with band 1. Since this is the lowest range, S101B is not used. If, however, S101 is selecting band 3, S101B moves two positions clockwise. The high end of the secondary winding is then shorted to the low end via contact 15 of S101B. Since the low end of each transformer is shorted together, the high end of T102 (associated with band 2) is also shorted to the low end through contact 14 of S101B. This system of shorting transformers avoids any possible interaction between transformers not used and transformers in use.

b. ANTENNA PREAMPLIFIER, R-F AMPLIFIER, AND MIXER CIRCUIT. This circuit (figure 4–3) consists of two stages of transformer coupled r-f amplification and a mixer stage to produce intermediate frequency. Switches S126 and S151, which are controlled by the band selector switch, are shown in the band 1 position.

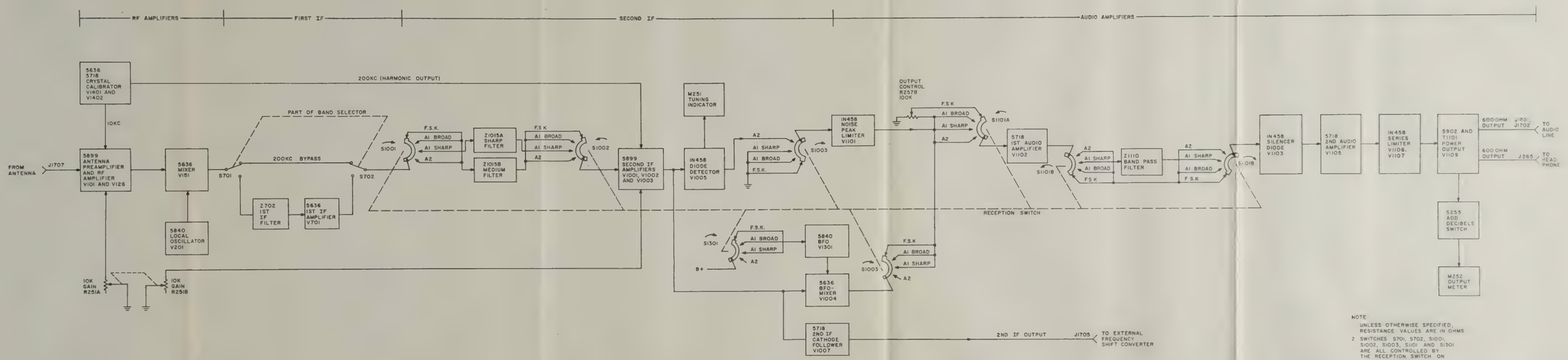
Input to the control grid of first r-f amplifier V101 is received from the antenna input circuit. The r-f signal is amplified in V101, and applied to second r-f amplifier V126 through contacts of band selector switch S126A (section 1), coupling transformer T126, and sections 2 and 3 of S126A. Transformer T126 is the coupling transformer associated with band 1. Three sections of S126A and two sections of S126B are used to switch this transformer into the circuit.

Section 1 of S126A connects the plate of V101 to the high side of the primary of T126. A second input applied to the high side of T126 is the output from the crystal calibrator when CAL. ON-OFF switch S252 is placed in the ON position. To avoid having two inputs to V126, B+ voltage for V101 is routed through S252. Thus, when this switch is in the ON position, V101 is inoperative and only the crystal calibrator signal is applied to V126.

In band 1, section 1 of S126B opens the circuit of capacitor C139. However, in bands 2 through 4, section 1 places capacitor C139 across the primary of the transformer associated with this particular band. This is possible since the low side of the T126 primary is common to the low sides of the primaries of transformers associated with bands 2 through 5.

The secondary tap of T126 is connected to the grid of V126 via section 3 of S126A. Section 2 of S126A places tuning capacitor C251C across the secondary of T126. This stage is also provided with a shorting switch (section 2 of S126B) which shorts out the transformers associated with the bands below the selected band. Operation of this switch is similar to operation of the shorting switch contained in the antenna input circuit and discussed in paragraph 4–2*a*.

Gain of r-f amplifiers V101 and V126 is controlled by GAIN control R251A in the MGC circuit. GAIN



NOTE
UNLESS OTHERWISE SPECIFIED, RESISTANCE VALUES ARE IN OHMS
2 SWITCHES S701, S702, S1001, S1002, S1003, S1101 AND S1301 ARE ALL CONTROLLED BY THE RECEPTION SWITCH ON THE FRONT PANEL

Figure 4-1. Functional Block Diagram

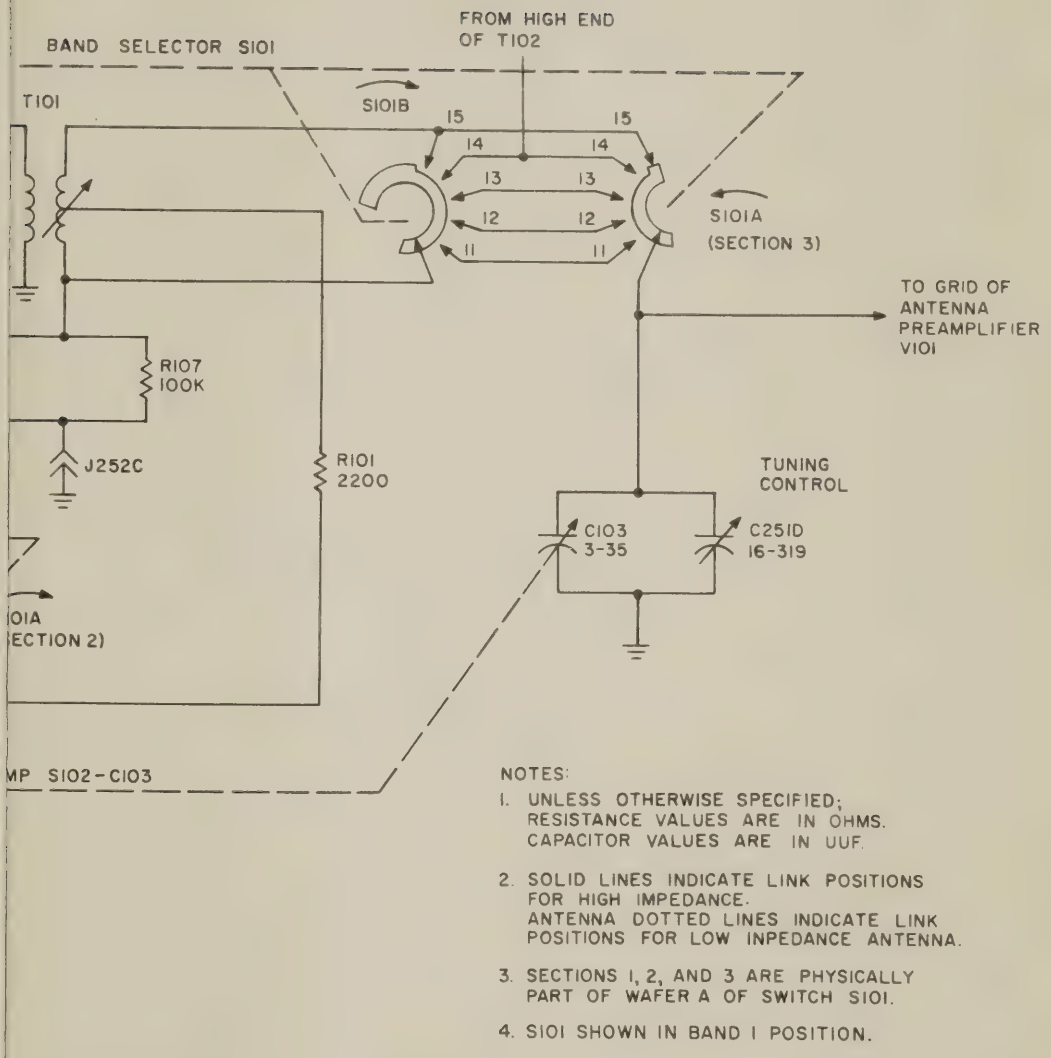
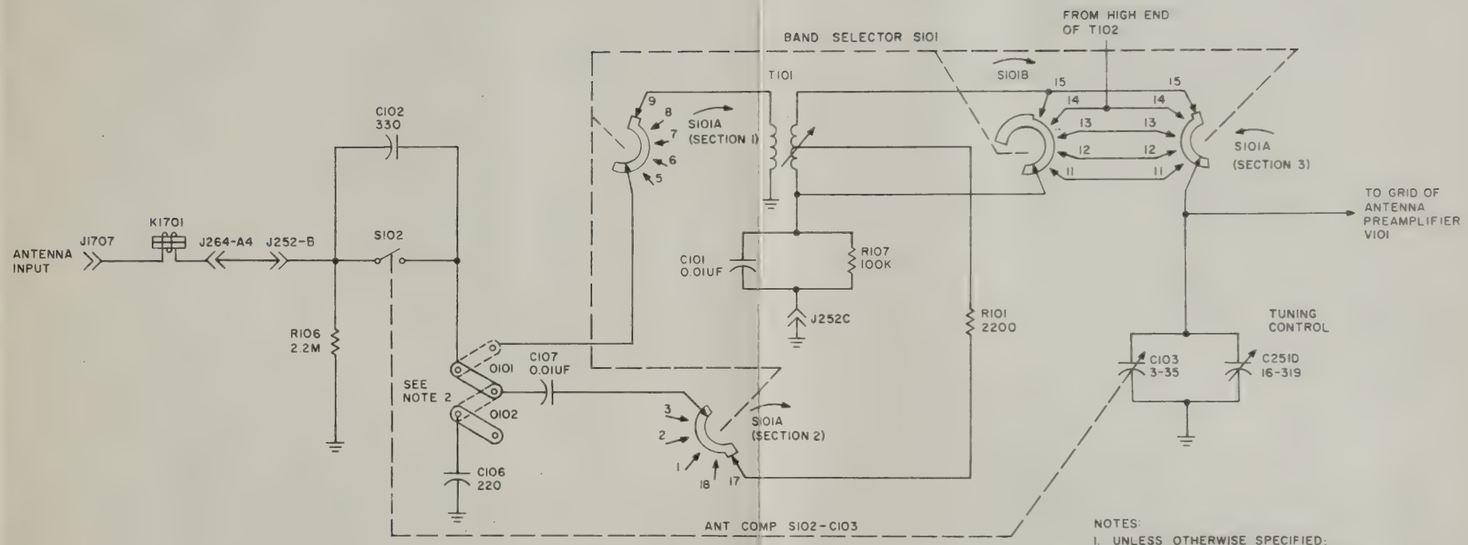


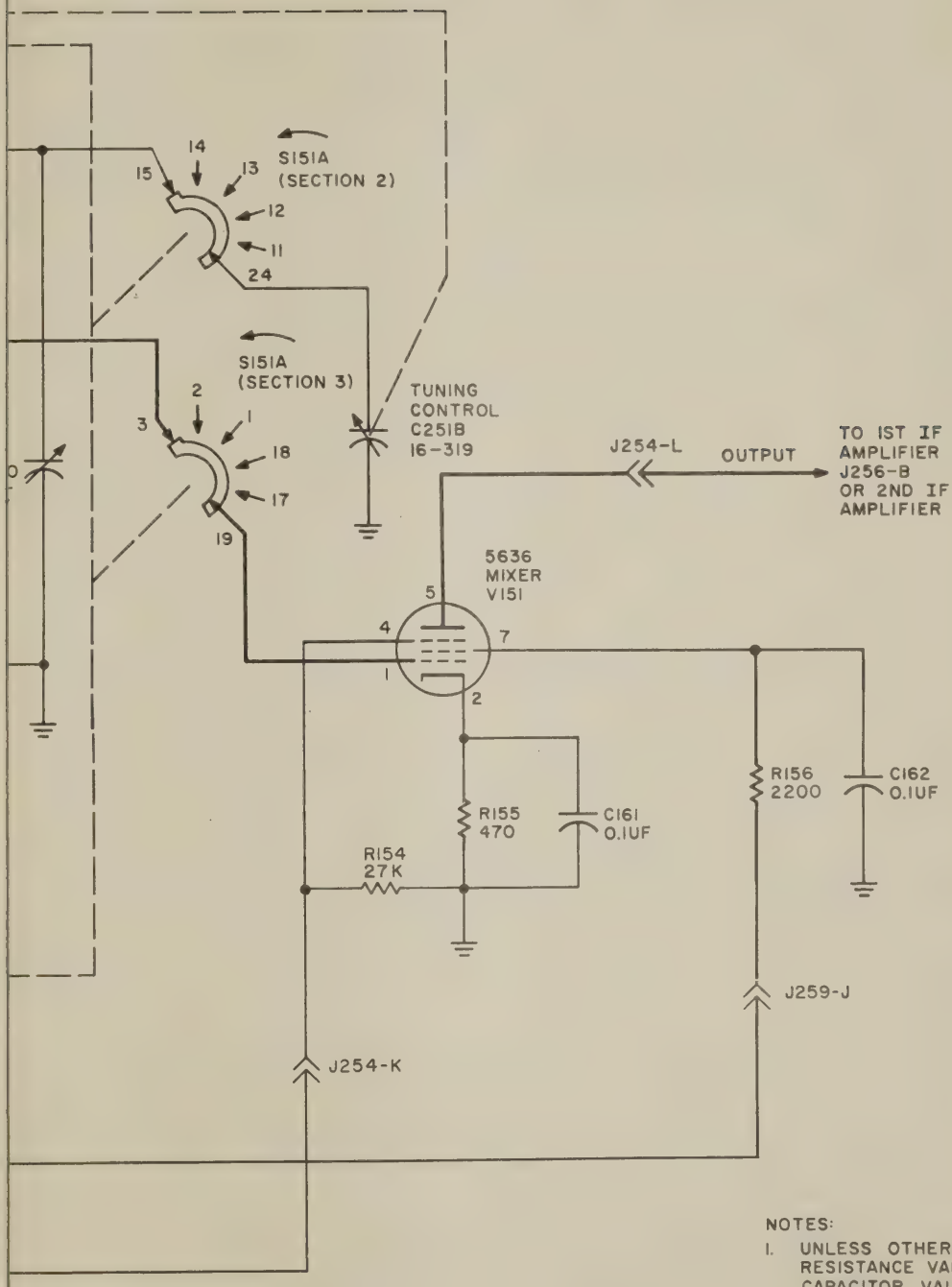
Figure 4–2. Antenna Input Circuit, Simplified Schematic Diagram



NOTES:

1. UNLESS OTHERWISE SPECIFIED; RESISTANCE VALUES ARE IN OHMS. CAPACITOR VALUES ARE IN UUF
2. SOLID LINES INDICATE LINK POSITIONS FOR HIGH IMPEDANCE ANTENNA. DOTTED LINES INDICATE LINK POSITIONS FOR LOW INPEDANCE ANTENNA.
3. SECTIONS 1, 2, AND 3 ARE PHYSICALLY PART OF WAFER A OF SWITCH S101.
4. S101 SHOWN IN BAND 1 POSITION.

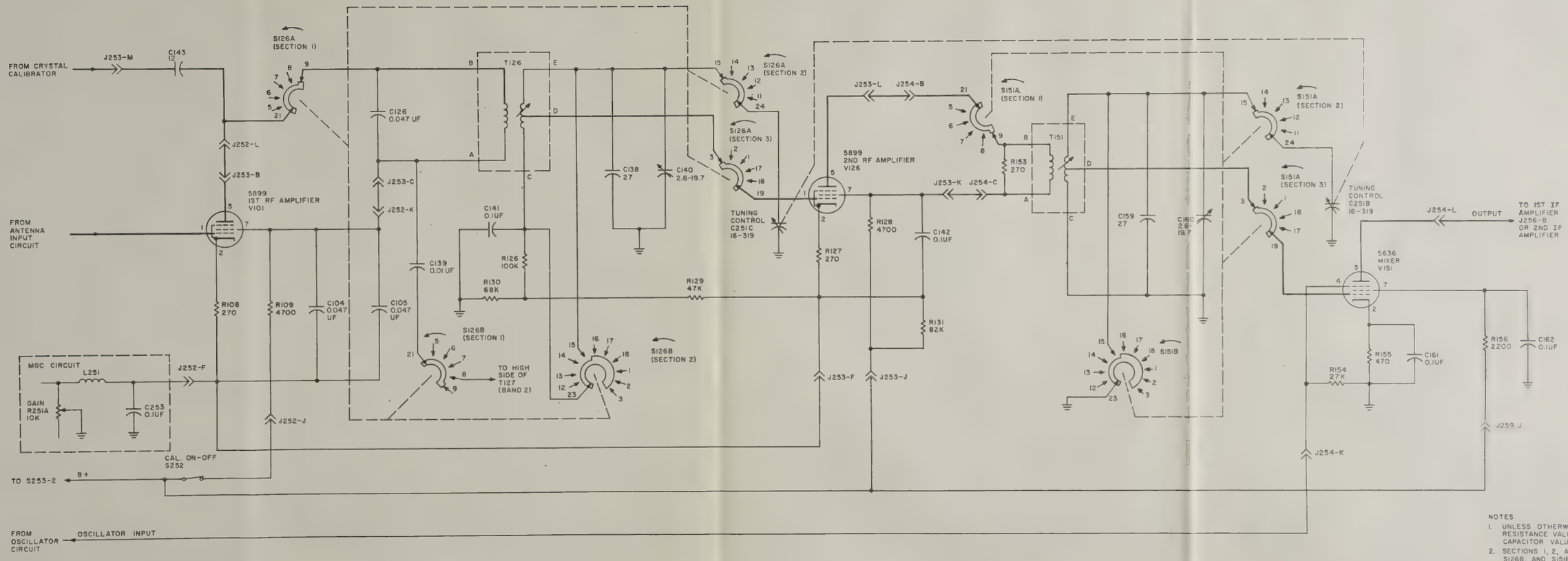
Figure 4-2. Antenna Input Circuit, Simplified Schematic Diagram



NOTES:

1. UNLESS OTHERWISE SPECIFIED; RESISTANCE VALUES ARE IN OHMS. CAPACITOR VALUES ARE IN UUF.
2. SECTIONS 1, 2, AND 3 OF S126A, S126B, AND S151B ARE PHYSICALLY PART OF THE ASSOCIATED WAFERS A AND B OF THE SWITCH.

Figure 4–3. Antenna Preamplifier, R-F Amplifier and Mixer Circuit, Simplified Schematic Diagram



NOTES

1. UNLESS OTHERWISE SPECIFIED, RESISTANCE VALUES ARE IN OHMS, CAPACITOR VALUES ARE IN UUF.
2. SECTIONS 1, 2, AND 3 OF S126A, S126B, AND S151B ARE PHYSICALLY PART OF THE ASSOCIATED WAFERS A AND B OF THE SWITCH

Figure 4-3. Antenna Preamplifier, R-F Amplifier and Mixer Circuit, Simplified Schematic Diagram

control R251A is connected in series with inductor L251 and cathode resistors R108 and R127 of the two tubes. Resistors R129, R130, and R131 form a voltage divider network to provide a portion of the B+ supply available to allow GAIN control R251A to provide variable bias for controlling the gain of V101 and V126. Capacitor C255 and L251 form a smoothing filter to reduce r-f currents in the gain control circuit. When strong input signals exist, the voltage divider network can provide high cathode bias voltage at V101 and V126, thus preventing the tubes from saturating.

The output of V126 is coupled to the control grid of mixer V151 through transformer T151. This transformer is switched into the circuit for band 1 operation exactly as was T126, except that S151A and S151B are used instead of S126A and S126B. Oscillator input is applied to the suppressor grid of V151. The resultant output of the mixer is applied to either the first i-f amplifier or the second i-f amplifier.

The destination of the output is determined by the selected band. Because of the frequency range of the equipment, it is not feasible for the mixer to supply the required 200 kc intermediate frequency to all bands. During band 1 or band 4 operation, the output of the mixer is 60 kc and is applied to the first i-f amplifier. For bands 2, 3, and 5 the output of V151 is 200 kc and is applied directly to the second i-f amplifier.

c. OSCILLATOR CIRCUIT.—The oscillator used in the receiving set is a Hartley circuit. For bands 1 and 4, the oscillator generates a signal 60 kc above the signal frequency. For remaining bands, oscillator output is 200 kc above the incoming signal. The cathode and control grid of oscillator tube V201 are connected to L201 in the tank circuit through contacts of S201A (sections 1 and 2) which is controlled by the band selector switch. (See figure 4–4.) The tank circuit consists of coil L201, L202, L203, L204, or L205 and appropriate fixed and trimmer capacitors, and the oscillator section of ganged tuning capacitor C251A. Tuning capacitor C251A is connected into the tank circuit through contacts of S201A (section 3).

The oscillator tuned circuit for band 1 includes capacitors C251A, C217, C220, C219, C218, and coil L201. To provide proper oscillator feedback, pin E of L201 is connected to the cathode (through R202) and contacts of S201A (section 1). The control grid is connected to pin D of L201 through grid leak network R201 and C223 and contacts of S201A (section 2). Resistor R202 is connected in series with the cathode to improve the stability of the circuit. The screen grid of V201 acts as the oscillator anode. It is coupled to the ground end of the tuned circuit through capacitor C224.

Oscillator signals are electron-coupled to the plate and capacitor coupled to mixer V151 through C226. The plate and screen voltages of V201 are regulated to ensure stable output from the oscillator. Zener diodes VR1601 and VR1602 physically located in the power supply, regulate heater voltage.

d. FIRST I-F AMPLIFIER CIRCUIT.—The first i-f amplifier is used during band 1 and band 4 operation when mixer output is 60 kc. When the RECEPTION switch is placed in band 1 or band 4 position switch S701 closes and applies the output of the mixer to the suppressor grid of converter V701 via band pass filter Z702. Switch S702 applies the output of V701 across the primary of T703. When bands 2, 3, or 5 are selected, S701 and S702 bypass the first i-f amplifier.

Converter V701 operates as a 140 kc, crystal-controlled oscillator connected as a Pierce circuit. (See figure 4–5.) The feedback relations are obtained through capacitors C716, C717, and the interelectrode capacitance of the tube elements. The 140 kc signal, generated by V701, is heterodyned with the 60 kc input at the suppressor grid resulting in a 200 kc signal that is applied through S702 to the primary tuned circuit of T703. The signal induced in the secondary of T703 is applied to the second i-f amplifier circuit.

e. SECOND I-F AMPLIFIER CIRCUIT.—The 200 kc signal present at input jack J1001, terminal B, is applied to a filter band-pass circuit comprising Z1015, switches S1001, S1002, sections 1 and 2. (See figure 4–6.) Band-pass filter Z1015 is divided into two sections: sharp filter Z1015A and medium filter Z1015B. Sharp filter Z1015A provides a band-pass of approximately 1 kc centered about 200 kc; band-pass of approximately 3 kc centered about 200 kc is provided by medium filter Z1015B. The filter selected depends on the position of the RECEPTION switch which controls the positions of switches S1001 and S1002.

When the RECEPTION switch is placed in the F.S.K., A1 BROAD, or A2 position, the signal is fed through medium filter Z1015B. When the RECEPTION control is placed in the A1 SHARP position, sharp filter Z1015A is used. The signal from filter Z1015A or Z1015B is then fed to first i-f amplifier V1001 through contacts of S1002 (section 1). The signal at the plate of V1001 is coupled to V1002 by the broadly tuned transformer circuit comprising L1016, C1057, R1009, T1015, C1059, and C1040. Inductance of each coil (L1016 and T1015) is made variable by means of adjustable powdered iron cores in each coil. I-f amplifiers V1002 and V1003 are similar to V1001 and provide additional amplification.

GAIN control potentiometer R251B is connected to cathode bias resistor R1006 of V1001 and to the cathode bias resistor of V1002. GAIN control potentiometer R251B permits gain of these two amplifiers to be increased or decreased, depending upon whether greater or less receiver gain is desired.

The output from third i-f amplifier V1003 feeds three circuits: the BFO mixer (active when the RECEPTION switch is placed in the F.S.K., A1 BROAD, or A1 SHARP positions), diode detector V1005, TUNING meter M251 (operative for all types of inputs), and cathode follower V1007.

Output of V1003 is transformer coupled to diode detector V1005. The audio voltage is developed across

control R251A is connected in series with inductor L251 and cathode resistors R108 and R127 of the two tubes. Resistors R129, R130, and R131 form a voltage divider network to provide a portion of the B+ supply available to allow GAIN control R251A to provide variable bias for controlling the gain of V101 and V126. Capacitor C255 and L251 form a smoothing filter to reduce r-f currents in the gain control circuit. When strong input signals exist, the voltage divider network can provide high cathode bias voltage at V101 and V126, thus preventing the tubes from saturating.

The output of V126 is coupled to the control grid of mixer V151 through transformer T151. This transformer is switched into the circuit for band 1 operation exactly as was T126, except that S151A and S151B are used instead of S126A and S126B. Oscillator input is applied to the suppressor grid of V151. The resultant output of the mixer is applied to either the first i-f amplifier or the second i-f amplifier.

The destination of the output is determined by the selected band. Because of the frequency range of the equipment, it is not feasible for the mixer to supply the required 200 kc intermediate frequency to all bands. During band 1 or band 4 operation, the output of the mixer is 60 kc and is applied to the first i-f amplifier. For bands 2, 3, and 5 the output of V151 is 200 kc and is applied directly to the second i-f amplifier.

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e. SECOND I-F AMPLIFIER CIRCUIT.—The 200 kc signal present at input jack J1001, terminal B, is applied to a filter band-pass circuit comprising Z1015, switches S1001, S1002, sections 1 and 2. (See figure 4–6.) Band-pass filter Z1015 is divided into two sections: sharp filter Z1015A and medium filter Z1015B. Sharp filter Z1015A provides a band-pass of approximately 1 kc centered about 200 kc; band-pass of approximately 3 kc centered about 200 kc is provided by medium filter Z1015B. The filter selected depends on the position of the RECEPTION switch which controls the positions of switches S1001 and S1002.

When the RECEPTION switch is placed in the F.S.K., A1 BROAD, or A2 position, the signal is fed through medium filter Z1015B. When the RECEPTION control is placed in the A1 SHARP position, sharp filter Z1015A is used. The signal from filter Z1015A or Z1015B is then fed to first i-f amplifier V1001 through contacts of S1002 (section 1). The signal at the plate of V1001 is coupled to V1002 by the broadly tuned transformer circuit comprising L1016, C1057, R1009, T1015, C1059, and C1040. Inductance of each coil (L1016 and T1015) is made variable by means of adjustable powdered iron cores in each coil. I-f amplifiers V1002 and V1003 are similar to V1001 and provide additional amplification.

GAIN control potentiometer R251B is connected to cathode bias resistor R1006 of V1001 and to the cathode bias resistor of V1002. GAIN control potentiometer R251B permits gain of these two amplifiers to be increased or decreased, depending upon whether greater or less receiver gain is desired.

The output from third i-f amplifier V1003 feeds three circuits: the BFO mixer (active when the RECEPTION switch is placed in the F.S.K., A1 BROAD, or A1 SHARP positions), diode detector V1005, TUNING meter M251 (operative for all types of inputs), and cathode follower V1007.

Output of V1003 is transformer coupled to diode detector V1005. The audio voltage is developed across

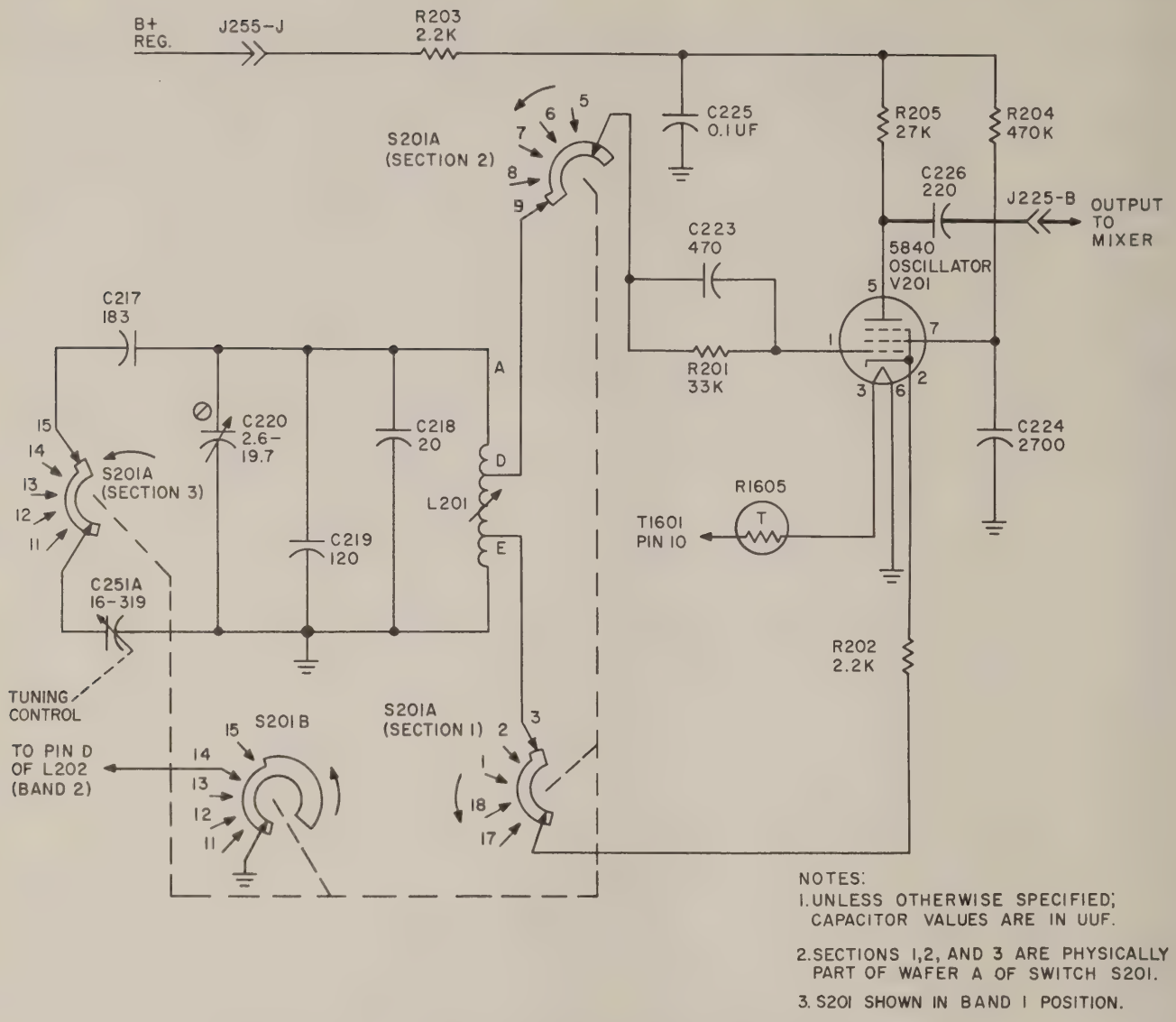


Figure 4–4. Oscillator Circuit, Simplified Schematic Diagram

resistor R1027 and capacitor C1058. The audio signal is then passed through section 1 of S1003 (during A2 reception only) to the audio circuit.

Output of the diode detector is applied to TUNING meter M251 (which indicates the current in the diode detector). When the receiver is detuned, the rectified signal voltage from V1005 is low and the meter reads on the low end of the scale. As the desired signal is tuned, the rectified voltage increases, causing meter indication to increase. HIGH-LOW switch S254 is spring-loaded and normally in LOW position. In this position, resistor R253 attenuates the meter reading. When tuning the receiver for signals of low strength, HIGH-LOW switch S254 may be placed in the HIGH position to give a more accurate tuning indication. The switch is spring-loaded to protect the meter; if accidentally left in the HIGH position, strong input signals may peg the needle and ruin the meter.

A 200 kc signal from the crystal calibrator is applied to the grid of second i-f amplifier V1002 when CAL. OFF-ON switch S252 is placed in the ON position. This signal is heterodyned with the calibration signal obtained through the first mixer when the tuning dial is being calibrated. When the tuning dial is accurately on frequency, a zero beat results. If the tuning dial does not indicate the true frequency, a difference frequency, in the audio range, results. The main tuning dial can thereby be calibrated without the use of external signals.

f. BFO AND BFO MIXER CIRCUIT.—The beat frequency oscillator (BFO) applies a heterodyning signal to BFO mixer V1004 which in turn, supplies an audio signal to the audio lines during F.S.K., A1 BROAD, or A1 SHARP reception.

Beat frequency oscillator V1301 is connected in a Hartley circuit with the screen grid acting as the oscillator anode. The tank circuit (Z1301, C1307, and

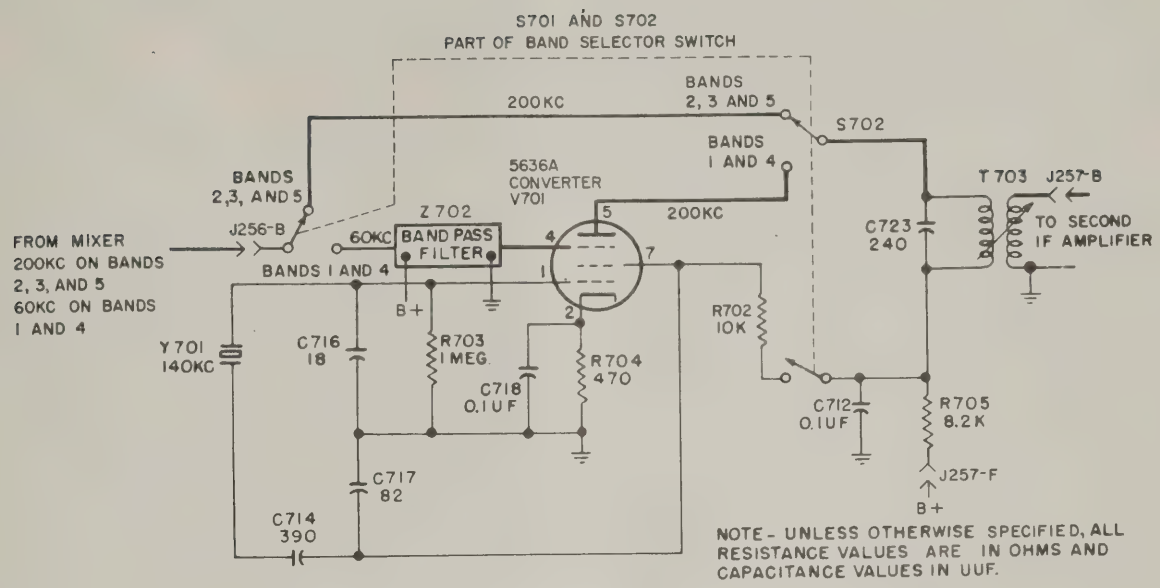


Figure 4–5. First I-F Amplifier Circuit, Simplified Schematic Diagram

C1309) is tuned to a frequency of 200 ± 1.5 kc. (See figure 4–7.) The oscillator signal is electron coupled to the plate of V1301. From the plate of V1301, the beat frequency signal is coupled through C1306 to the suppressor grid of BFO mixer V1004. The i-f signal, from third i-f amplifier V1003, is fed to the control grid of BFO mixer V1004; the two signals are heterodyned in V1004 to produce a beat frequency in the audible range. The beat frequency signal on the plate of V1004 is coupled to the audio circuit through capacitor C1047 and switch S1003.

Output frequency of BFO V1301 is varied by adjustable FREQ. VERNIER control C1309. Adjustable capacitor C1309 is shunted by trimmer capacitor C1307 which permits alignment.

Plate and screen voltage (B+) for V1301 is supplied through contacts of CAL. ON-OFF switch S252 and part of the RECEPTION switch S1301. If crystal calibrator is to be used to calibrate the tuning dial, S252 is placed in the ON position and B+ is removed from this stage. Similarly, if S1301 is placed in the A2 position, B+ is removed from the circuit. Thus, the BFO circuit is inoperative when crystal calibrator is in use or when receiving A2 signals.

g. AUDIO CIRCUIT.—The audio circuit (figure 4–8) consists of a noise peak limiter circuit, four similar audio amplifier stages, and a series limiter circuit. The output of this circuit is monitored by an OUTPUT meter which indicates the output level.

During A1 reception, output from the BFO mixer is directly applied to first audio amplifier V1102 through the contacts of RECEPTION switch S1101A (section 1). When the RECEPTION switch is set to the F.S.K. position, output of the BFO mixer is applied to V1102 through OUTPUT potentiometer R257B. OUTPUT potentiometer R257B provides a means of adjusting the F.S.K. signal level before it is applied to the first audio amplifier. This control is inoperative when S1101A, is set to A1 BROAD, A1 SHARP, or A2 position.

When A2 signals are received, the d-c output of diode detector V1005 is applied to the cathode of noise peak limiter V1101 through resistors R1104 and R1105. This voltage forward biases the diode so voltage developed across R1103 is applied to the grid of V1102 through R1101, C1114, and section 1 of RECEPTION switch S1101A. The combination of R1104, R1105, and C1101 comprises a filter network to remove any a-c component present in the signal. When signal conditions are normal, V1101 conducts and its output is applied to first audio amplifier V1102.

When a noise pulse, which exceeds the normal signal level is detected, an instantaneous decrease in potential on the plate of noise peak limiter diode V1101 results. However, voltage to the cathode of V1101 remains constant due to the filtering provided by C1101, R1104, and R1105. As a result, for a short time interval, the plate of V1101 is more negative than its cathode. During this time V1101 acts as an open circuit, and limits output noise pulse to a value corresponding to 40 percent modulation as determined by the relative values of R1102 and R1103.

Signals applied to first audio amplifier V1102, either from the BFO mixer or noise peak limiter V1101 are amplified by V1102 and capacitor coupled to contacts of S1101B (section 1). When the RECEPTION switch is placed in the A1 SHARP position, the output of V1102 is filtered by band-pass filter Z1110 and applied to the grid of second audio amplifier V1105 via contacts of S1101B (section 2), capacitor C1115, silencer

diode V1103, and capacitor C1105. Band-pass filter Z1110 narrows the signal bandwidth to 350 cycles during A1 SHARP reception only. This filter is bypassed by the contacts of RECEPTION switch S1101B (section 1) for all other types of reception.

The amplified output of V1105 is applied to limiter V1106 and V1107. Limiters V1106 and V1107 clip equally on positive and negative portions of the cycle. The level at which V1106 and V1107 cut off may be varied over a range of 40 decibels by OUTPUT control R257A during A1 or A2 reception. When the audio output from V1105 is applied to the cathode of V1106, the positive portion of this signal, above the plate potential of V1106, is clipped.

Similarly, the negative portion of the resultant signal, below the value of the plate potential (absolute magnitude), is clipped. Thus the signal voltage coupled to the grid of V1108, is maintained between the limits determined by the plate potential of the diodes. When the RECEPTION switch is set to the F.S.K. position, limiting is not desired and the plate potential of V1106 and V1107 is maintained constant by returning the plate of each diode to B+ through resistor R1112. The value of this resistor is such that V1106 and V1107 remain conductive throughout the entire cycle; this results in maximum output.

Output from the cathode of limiter V1107 is applied to the third audio amplifier through capacitor C1108. Output from V1108 is, in turn, applied to power amplifier V1109 through capacitor C1109. A negative feedback voltage, from the plate of V1109, is applied to the cathode of V1108 via resistors R1134, R1135, and R1132, and maintains a nearly constant output voltage under changing load conditions. The output from V1109 is applied to the primary of output transformer T1101.

Transformer T1101 has two secondary windings. One winding, a 150-ohm, unbalanced winding, supplies audio signals to the PHONES jacks via LEVEL potentiometer R258, and to OUTPUT meter M252. The second winding, a 200-ohm winding, which is balanced to ground, supplies the external audio lines through audio filter Z1703 and pins A and B of J1701 and J1702. LEVEL potentiometer R258 enables the audio signal level to the headphones to be adjusted.

OUTPUT meter M252 indicates the output level of the received signal in decibels. The range of the meter is controlled by four-position ADD DECIBELS switch S255. When S255 is in the +20 position, for strong input signals, the resistance in series with the meter is maximum. When S255 is placed in the +10db, 0db, or —10db position, certain resistors are shorted out, decreasing the total resistance in series with the meter. For example, with S255 in the +20db position, the total resistance in series with the meter is approximately 260 ohms. When S255 is placed in the 0db position, resistors R254 and R260 are shorted out and the total resistance decreases.

In order to protect the meter, S255 is spring loaded in the —10db position. Therefore, the switch must be held in this position when reading low-level inputs.

h. POWER SUPPLY CIRCUIT AND B+ DISTRIBUTION.—Figure 4–9 shows the power supply and B+ distribution circuit. Primary power is applied to the primary of transformer T1601 through line filter Z1702, line fuses F1601 and F1602, POWER ON-OFF switch S251, and power adjustment link O1601. The power adjustment link adapts transformer primary for one of three possible voltages: 105-volts ac, 115-volts ac, and 125-volts ac. Prior to installing the receiver, the adjustment link is set to the value closest to the actual line voltage. The primary of T1601 is also adaptable for 400- or 60-cycle operation.

One secondary winding of T1601 is provided with five terminals to supply filament voltage for the dial lamps and all tubes. The voltage from terminals 14 and 12, filtered by L252 and C252 is applied to the heater of V101, V126 and V151. Terminals 13 and 11 provide filament voltage for all other tubes except the noise limiter. Voltage for the dial lamp is through R3602, DIM rheostat R3601 and LAMPS switch S3601.

Terminals 10 and 12 of this winding are the source of the heater voltage for oscillator V201. Zener diodes VR1601 and VR1602, connected back to back, regulate the heater voltage. Resistor R1607 limits the heater current to V201.

Two lamps are provided for the dial assembly, one of which is normally operative and the second of which is a spare. If this lamp goes out, LAMPS switch S3601 is placed in the SPARE position, thus removing voltage from one lamp and applying it to the spare lamp. DIM rheostat R3601 varies the brightness of the light when lamp is on.

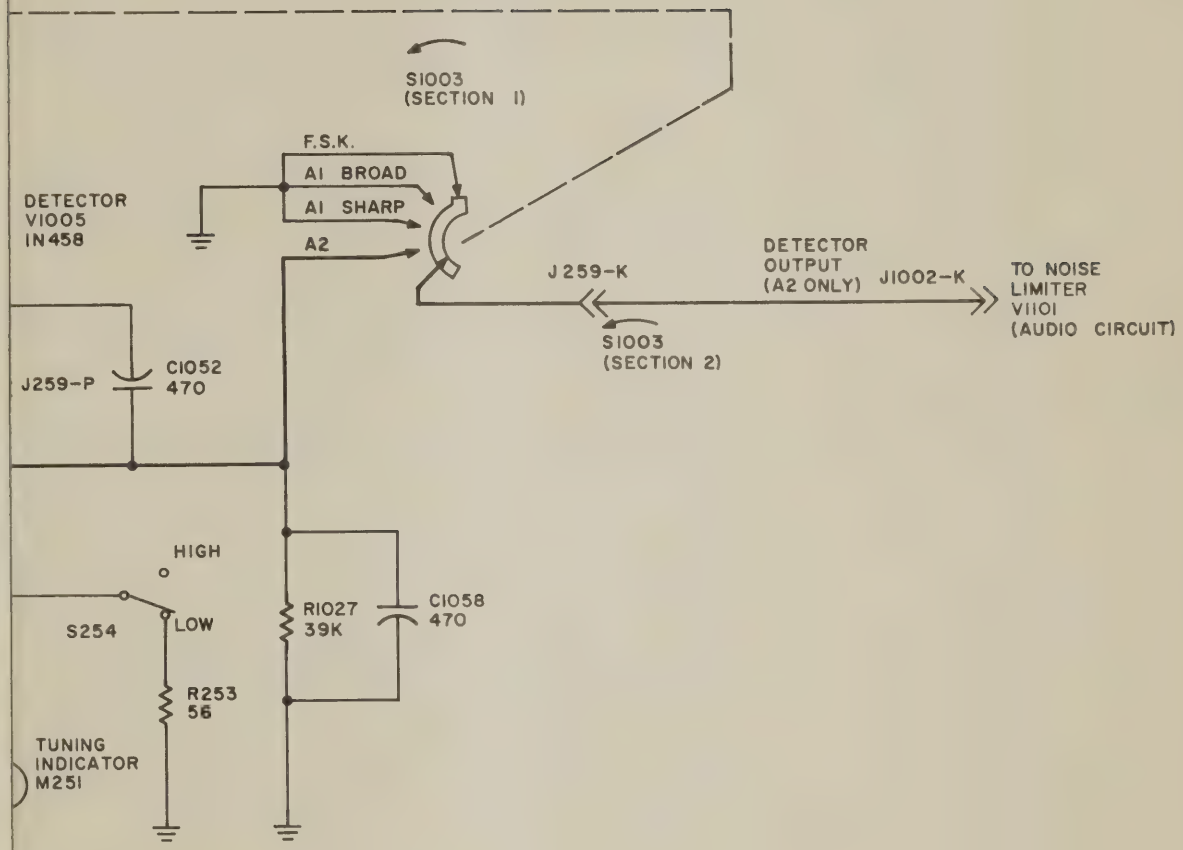
The second winding of T1601 provides filament voltage for the noise limiter (V1101) only.

NOTE

This voltage is not normally required in the AN/SRR–11A which uses 1N458. It is used in some equipments of this family which were manufactured with tube type 5647.

This winding is shunted by potentiometer R1601. Potentiometer R1601 is adjusted to eliminate any hum pickup from the filament.

The third winding of T1601 is connected to the anodes of rectifiers CR1601 through CR1604. Voltage at the cathode is filtered by two L-type filters. Voltage



NOTE:

1. UNLESS OTHERWISE SPECIFIED; RESISTANCE VALUES ARE IN OHMS. CAPACITOR VALUES ARE IN UUF.
2. SECTIONS 1 AND 2 OF S1001, S1002, AND S1003, AND SECTION 1 OF S1101A ARE PHYSICALLY PART OF ONE WAFER ON THE RESPECTIVE SWITCH.

Figure 4–6. Second I-F Amplifier Circuit, Simplified Schematic Diagram

diode V1103, and capacitor C1105. Band-pass filter Z1110 narrows the signal bandwidth to 350 cycles during A1 SHARP reception only. This filter is bypassed by the contacts of RECEPTION switch S1101B (section 1) for all other types of reception.

The amplified output of V1105 is applied to limiter V1106 and V1107. Limiters V1106 and V1107 clip equally on positive and negative portions of the cycle. The level at which V1106 and V1107 cut off may be varied over a range of 40 decibels by OUTPUT control R257A during A1 or A2 reception. When the audio output from V1105 is applied to the cathode of V1106, the positive portion of this signal, above the plate potential of V1106, is clipped.

Similarly, the negative portion of the resultant signal, below the value of the plate potential (absolute magnitude), is clipped. Thus the signal voltage coupled to the grid of V1108, is maintained between the limits determined by the plate potential of the diodes. When the RECEPTION switch is set to the F.S.K. position, limiting is not desired and the plate potential of V1106 and V1107 is maintained constant by returning the plate of each diode to B+ through resistor R1112. The value of this resistor is such that V1106 and V1107 remain conductive throughout the entire cycle; this results in maximum output.

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The second winding of T1601 provides filament voltage for the noise limiter (V1101) only.

NOTE

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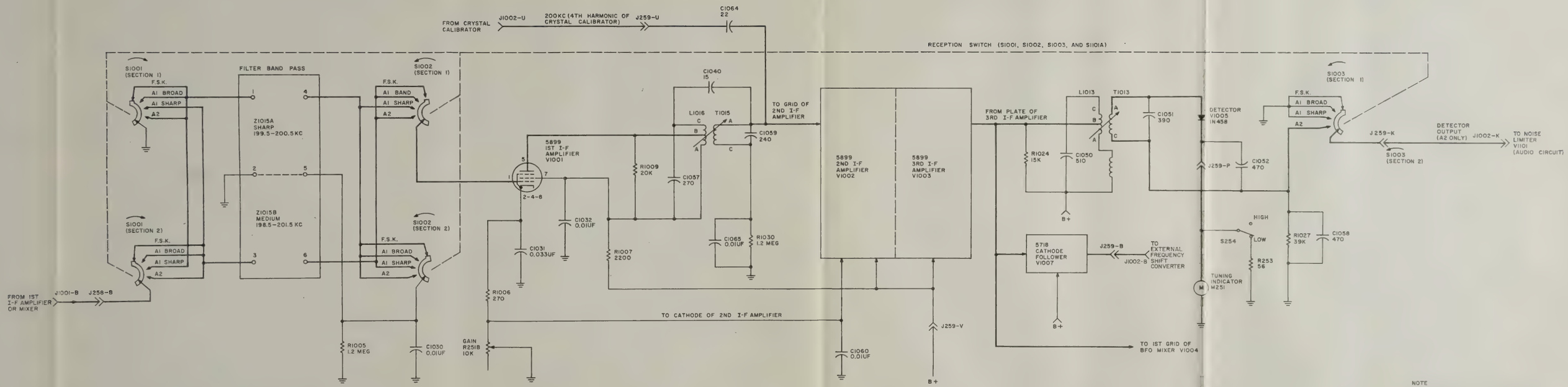

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Figure 4-6. Second I-F Amplifier Circuit, Simplified Schematic Diagram

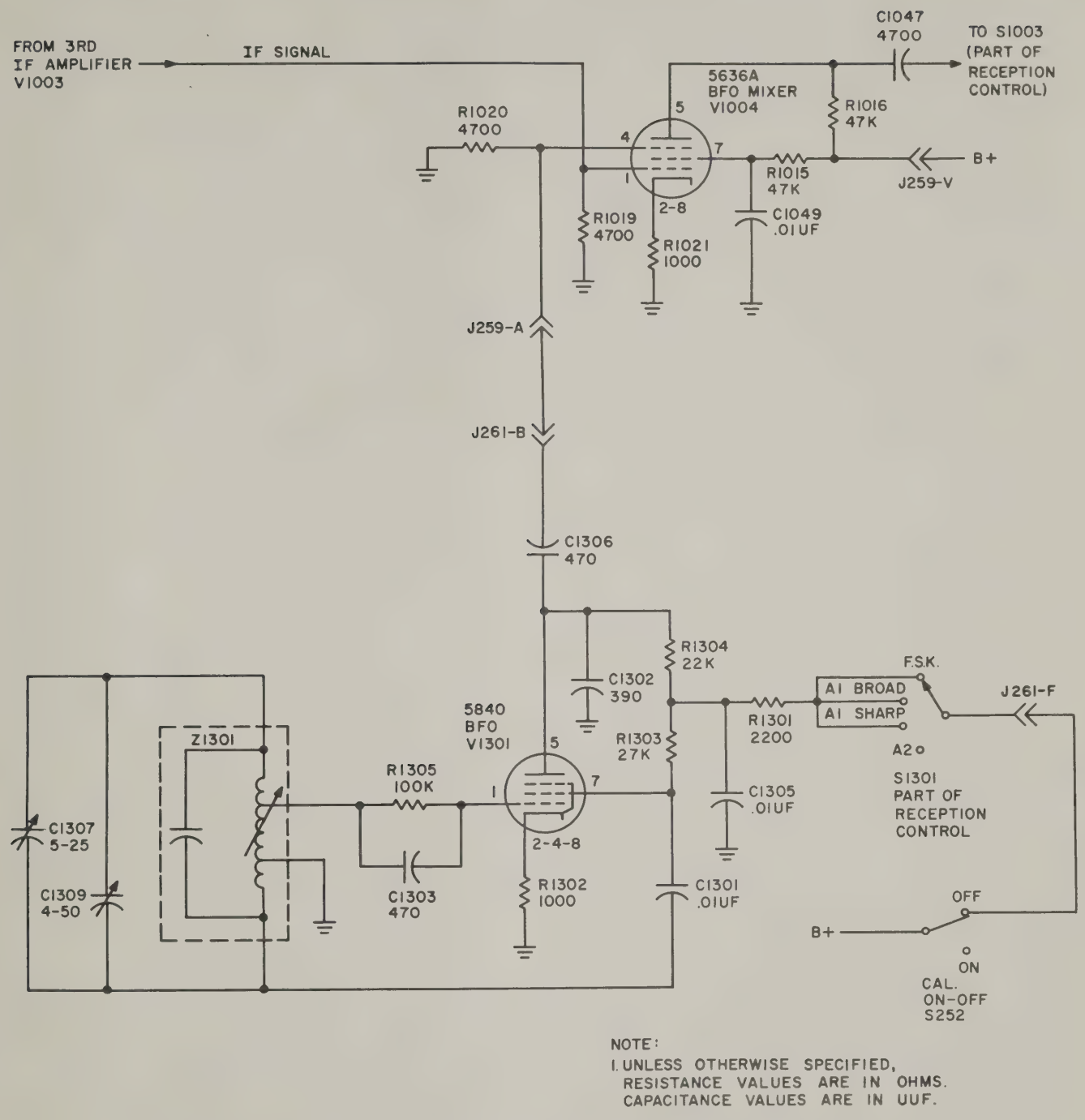


Figure 4–7. BFO and BFO Mixer Circuit, Simplified Schematic Diagram

at the output of the first filter (L1601A and C1602) is applied to a regulator circuit comprising VR1603, C1603, and R1603. The regulated B+ (+91 volts) is applied directly to the local oscillator, V201, for stabilization. This voltage is also applied to the crystal calibrator through CAL. ON-OFF switch S252; and to a bleeder on the i-f chassis to provide detector delay bias.

The unregulated B+ (+125 volts dc) is filtered by L1601B, R1604, and C1601. This voltage is applied to power lamp I251 through current limiting resistor R263, and directly to the r-f amplifier, mixer, first and second i-f amplifiers, audio circuit, and CAL. ON-OFF switch S252. When CAL. ON-OFF switch is in the OFF position, unregulated B+ voltage is applied directly to the BFO and antenna preamplifier through OPERATE-STANDBY switch S253. When CAL. ON-OFF switch is in the ON position, unregulated B+ voltage is removed from the BFO and antenna preamplifier, thereby prohibiting reception of external signals. The receiver can be disabled by placing OPERATE-STANDBY switch in the STANDBY position.

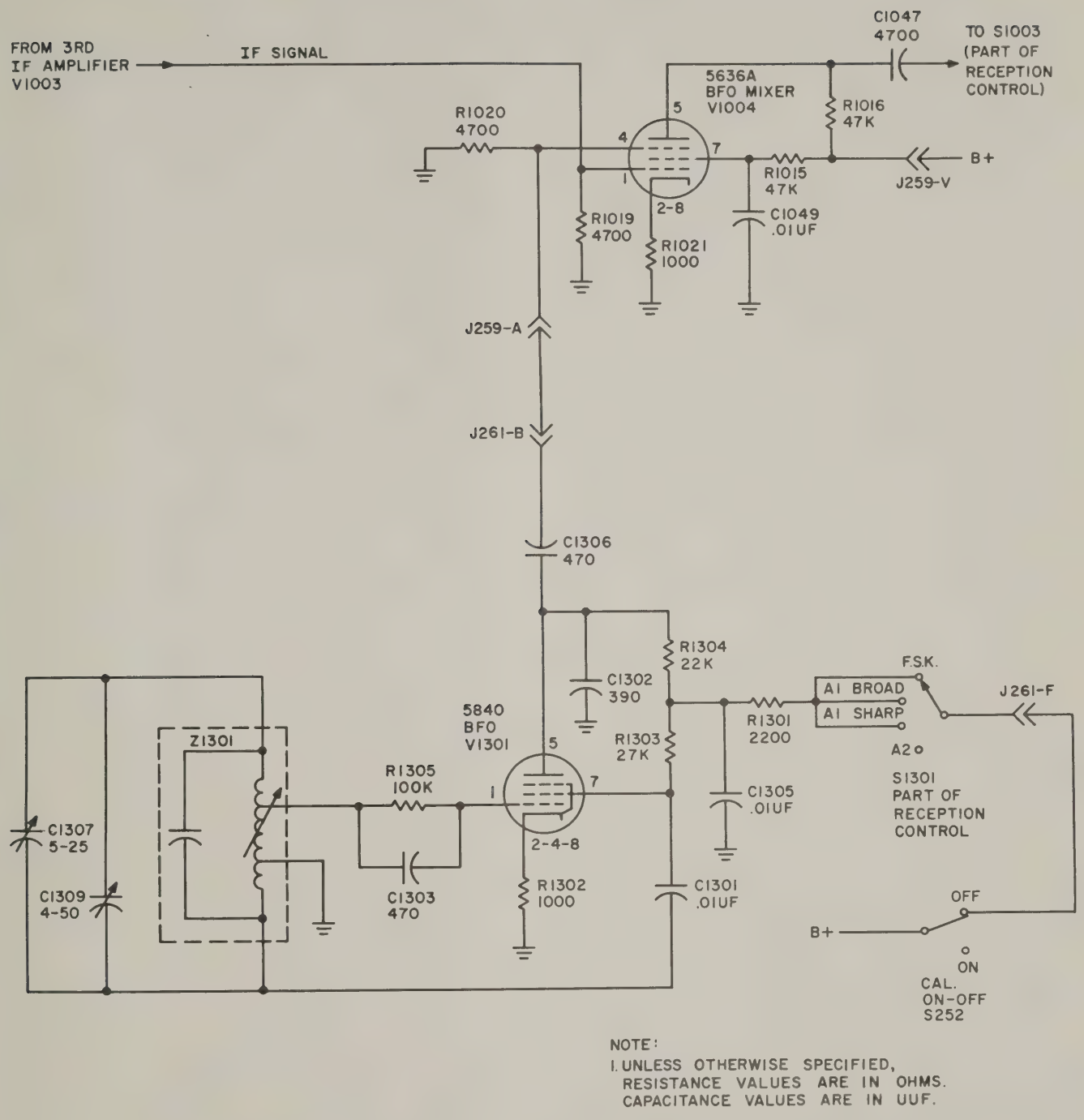


Figure 4-7. BFO and BFO Mixer Circuit, Simplified Schematic Diagram

at the output of the first filter (L1601A and C1602) is applied to a regulator circuit comprising VR1603, C1603, and R1603. The regulated B+ (+91 volts) is applied directly to the local oscillator, V201, for stabilization. This voltage is also applied to the crystal calibrator through CAL. ON-OFF switch S252; and to a bleeder on the i-f chassis to provide detector delay bias.

The unregulated B+ (+125 volts dc) is filtered by L1601B, R1604, and C1601. This voltage is applied to power lamp I251 through current limiting resistor R263, and directly to the r-f amplifier, mixer, first and second i-f amplifiers, audio circuit, and CAL. ON-OFF switch S252. When CAL. ON-OFF switch is in the OFF position, unregulated B+ voltage is applied directly to the BFO and antenna preamplifier through OPERATE-STANDBY switch S253. When CAL. ON-OFF switch is in the ON position, unregulated B+ voltage is removed from the BFO and antenna preamplifier, thereby prohibiting reception of external signals. The receiver can be disabled by placing OPERATE-STANDBY switch in the STANDBY position.

i. CRYSTAL CALIBRATOR CIRCUIT.—The crystal calibrator circuit provides accurate frequency check points for calibrating the main tuning dial. These check points occur at every 10 kc throughout the tuning range of the receiver. The output of this calibrator is supplied to the r-f amplifier and treated as a standard input; i.e., is mixed with the output of the local oscillator to produce an i-f frequency; then passed through the audio stages to output lines.

The crystal calibrator circuit consists of a 10 kc multivibrator synchronized by a 50 kc Pierce oscillator. (See figure 4-10.) The plate and grid of 50-kc oscillator V1401 are coupled to each other through capacitor C1406 and 50-kc crystal Y1401 in a conventional Pierce circuit. Capacitors C1401, C1402, and C1403 comprise a voltage divider network which maintains the proper voltage and phase relationship between the grid, cathode, and plate required for oscillation. The grid circuit includes variable capacitor C1401, which permits the frequency to be adjusted over a limited range.

The elements in V1402 act as two triodes to form a plate coupled multivibrator. The cathode, control grid, and screen grid act as one triode (the screen grid acts as the plate). The second triode consists of the suppressor grid, plate and the virtual cathode existing between grids 2 and 3 (the suppressor grid acts as the control grid for the second triode). The first triode is coupled to the control grid of the second triode through C1410; the second triode is coupled to the control grid of the first triode through C1409. Potentiometer R1411 in the cathode circuit of V1402 sets the output of V1402 at 10 kc.

Output of multivibrator V1402 contains the basic 10-kc signal as well as many harmonics. These outputs are all applied to the second r-f amplifier. Another output of the crystal calibrator is the fourth harmonic (200 kc) of V1401. This output is coupled from the plate of V1401, through C1404 to second i-f amplifier V1002. The signal is mixed with the intermediate frequency produced by mixing output of the local oscillator with the harmonic output of the 10-kc multivibrator.

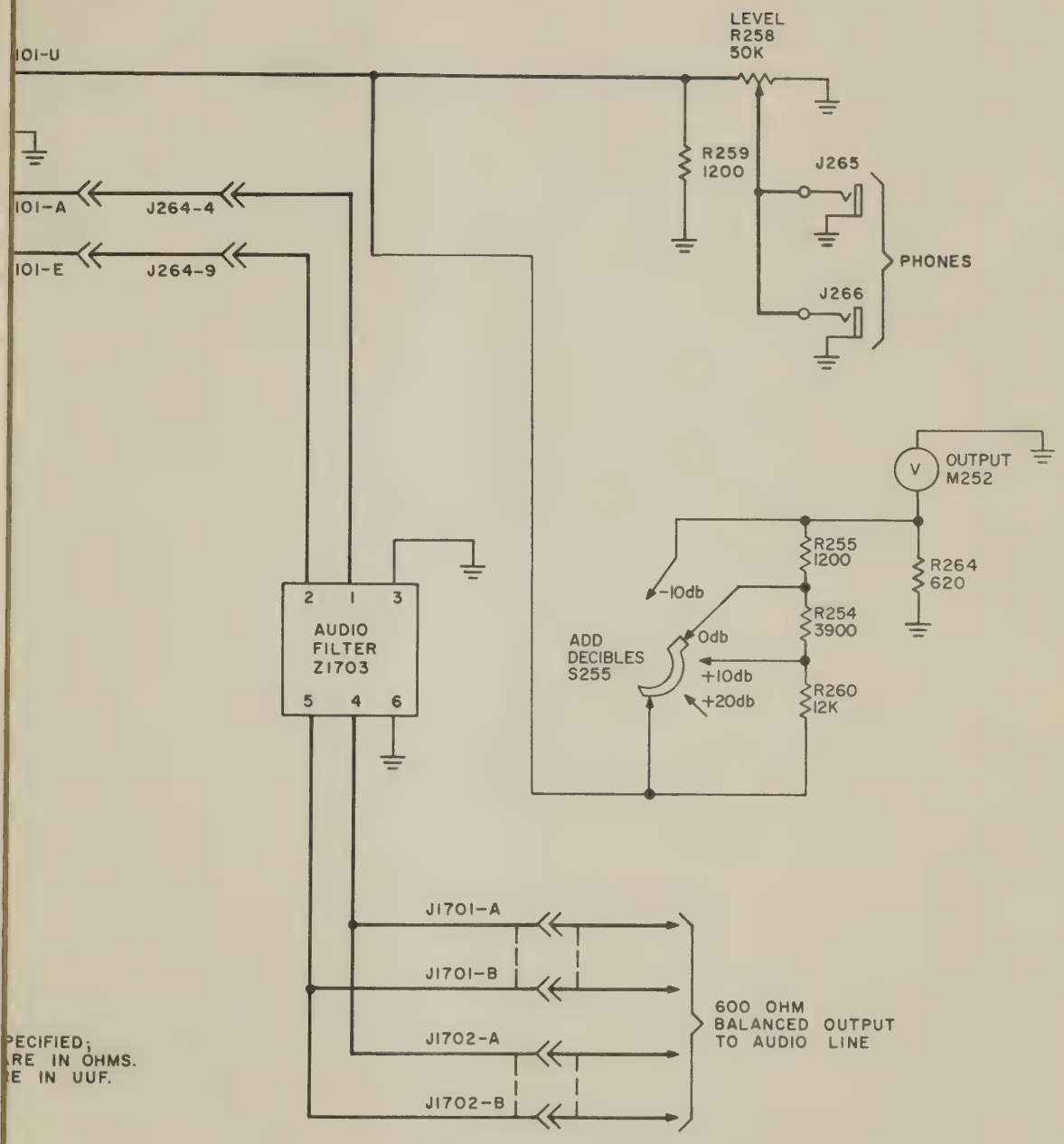


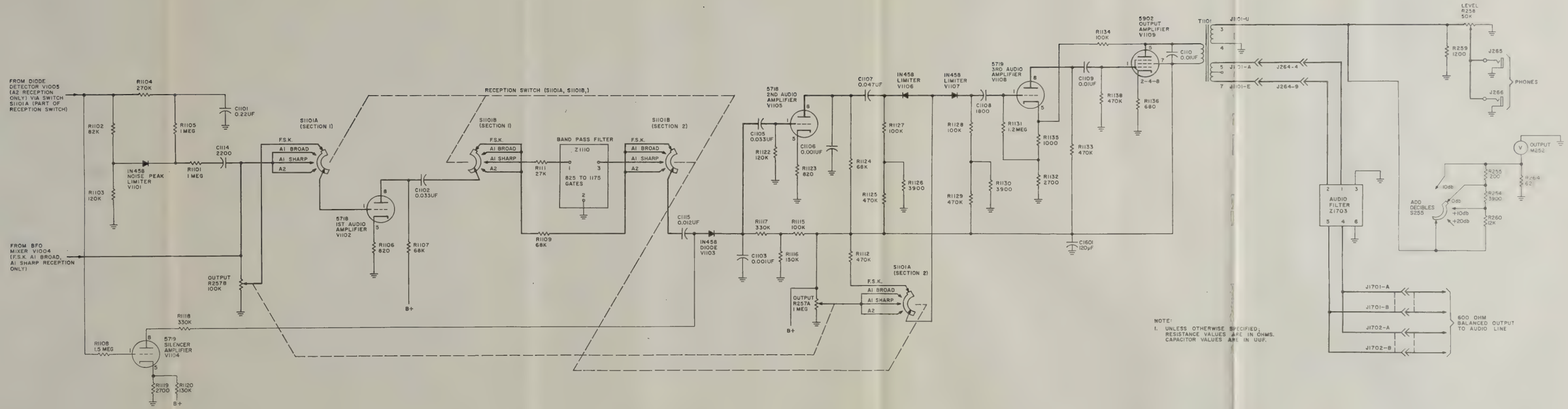
Figure 4–8. Audio Circuit, Simplified Schematic Diagram

i. CRYSTAL CALIBRATOR CIRCUIT.—The crystal calibrator circuit provides accurate frequency check points for calibrating the main tuning dial. These check points occur at every 10 kc throughout the tuning range of the receiver. The output of this calibrator is supplied to the r-f amplifier and treated as a standard input; i.e., is mixed with the output of the local oscillator to produce an i-f frequency; then passed through the audio stages to output lines.

The crystal calibrator circuit consists of a 10 kc multivibrator synchronized by a 50 kc Pierce oscillator. (See figure 4-10.) The plate and grid of 50-kc oscillator V1401 are coupled to each other through capacitor C1406 and 50-kc crystal Y1401 in a conventional Pierce circuit. Capacitors C1401, C1402, and C1403 comprise a voltage divider network which maintains the proper voltage and phase relationship between the grid, cathode, and plate required for oscillation. The grid circuit includes variable capacitor C1401, which permits the frequency to be adjusted over a limited range.

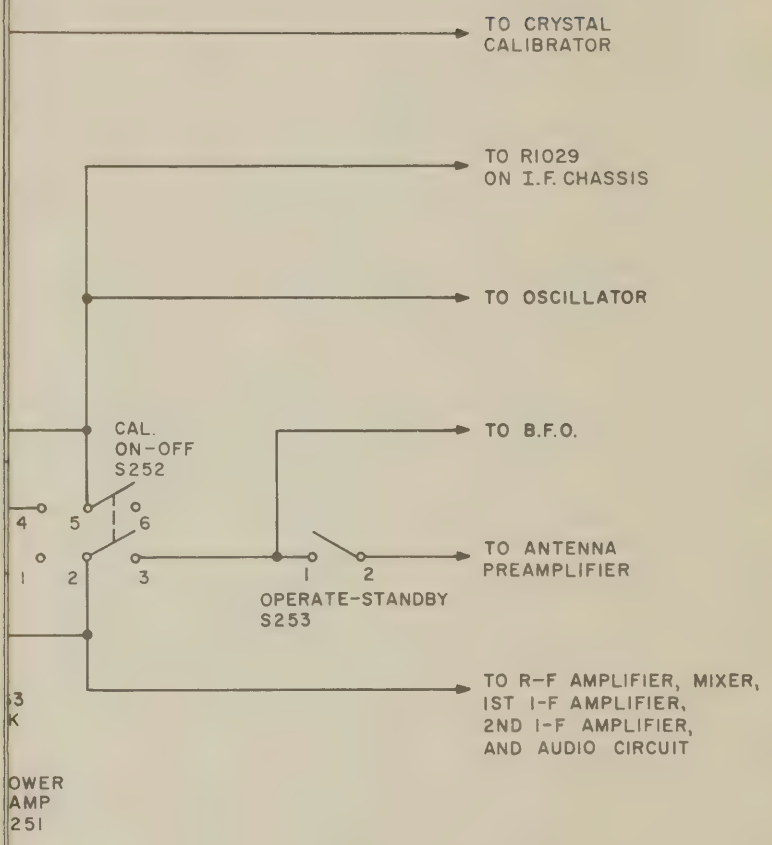
The elements in V1402 act as two triodes to form a plate coupled multivibrator. The cathode, control grid, and screen grid act as one triode (the screen grid acts as the plate). The second triode consists of the suppressor grid, plate and the virtual cathode existing between grids 2 and 3 (the suppressor grid acts as the control grid for the second triode). The first triode is coupled to the control grid of the second triode through C1410; the second triode is coupled to the control grid of the first triode through C1409. Potentiometer R1411 in the cathode circuit of V1402 sets the output of V1402 at 10 kc.

Output of multivibrator V1402 contains the basic 10-kc signal as well as many harmonics. These outputs are all applied to the second r-f amplifier. Another output of the crystal calibrator is the fourth harmonic (200 kc) of V1401. This output is coupled from the plate of V1401, through C1404 to second i-f amplifier V1002. The signal is mixed with the intermediate frequency produced by mixing output of the local oscillator with the harmonic output of the 10-kc multivibrator.



NOTE:
1. UNLESS OTHERWISE SPECIFIED: RESISTANCE VALUES ARE IN OHMS. CAPACITOR VALUES ARE IN UUF.

Figure 4-8. Audio Circuit, Simplified Schematic Diagram



NOTE:

1. UNLESS OTHERWISE SPECIFIED; RESISTANCE VALUES ARE IN OHMS.

Figure 4–9. Power Supply and B+ Distribution Circuit, Simplified Schematic Diagram

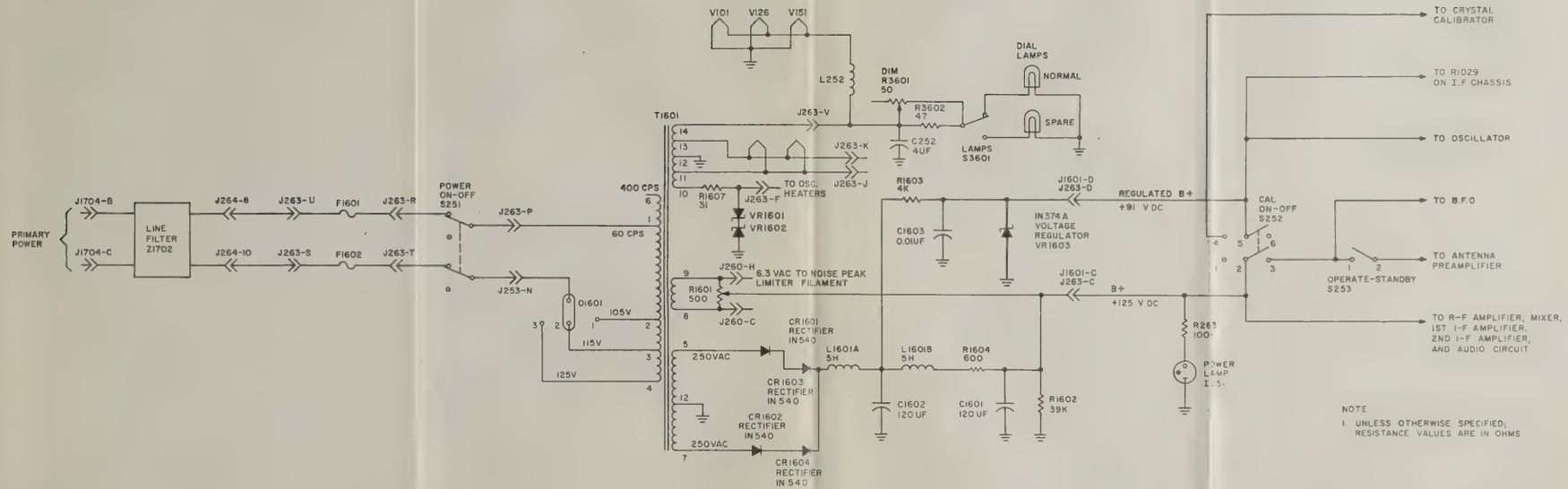


Figure 4-9. Power Supply and B+ Distribution Circuit, Simplified Schematic Diagram

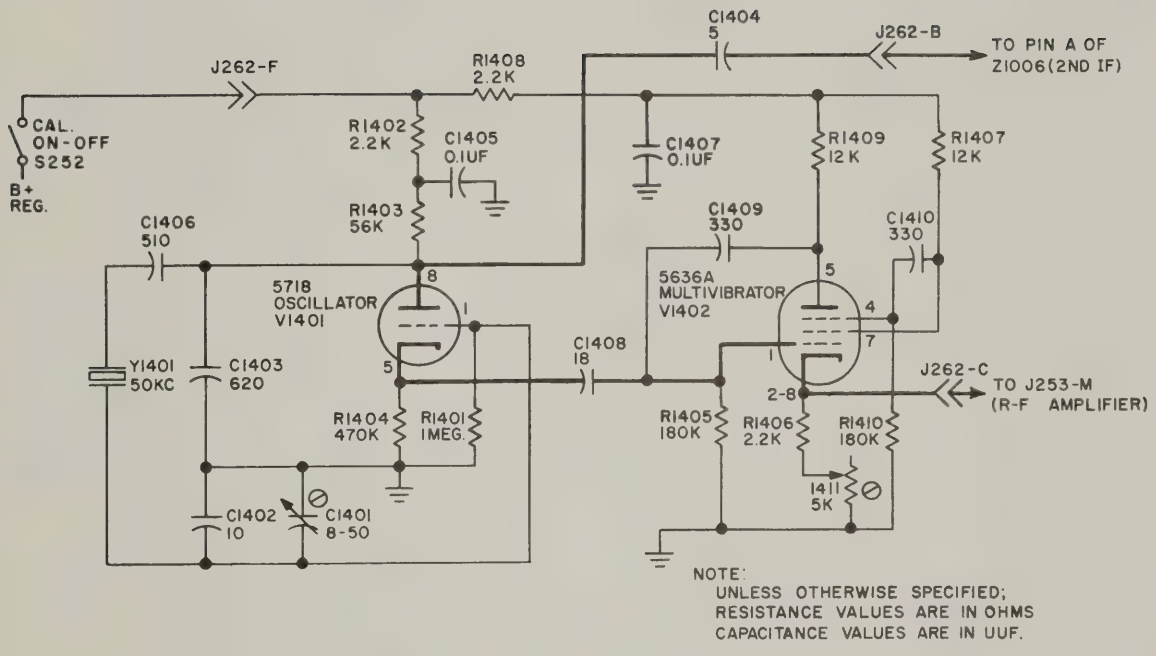


Figure 4–10. Crystal Calibrator Circuit, Simplified Schematic Diagram

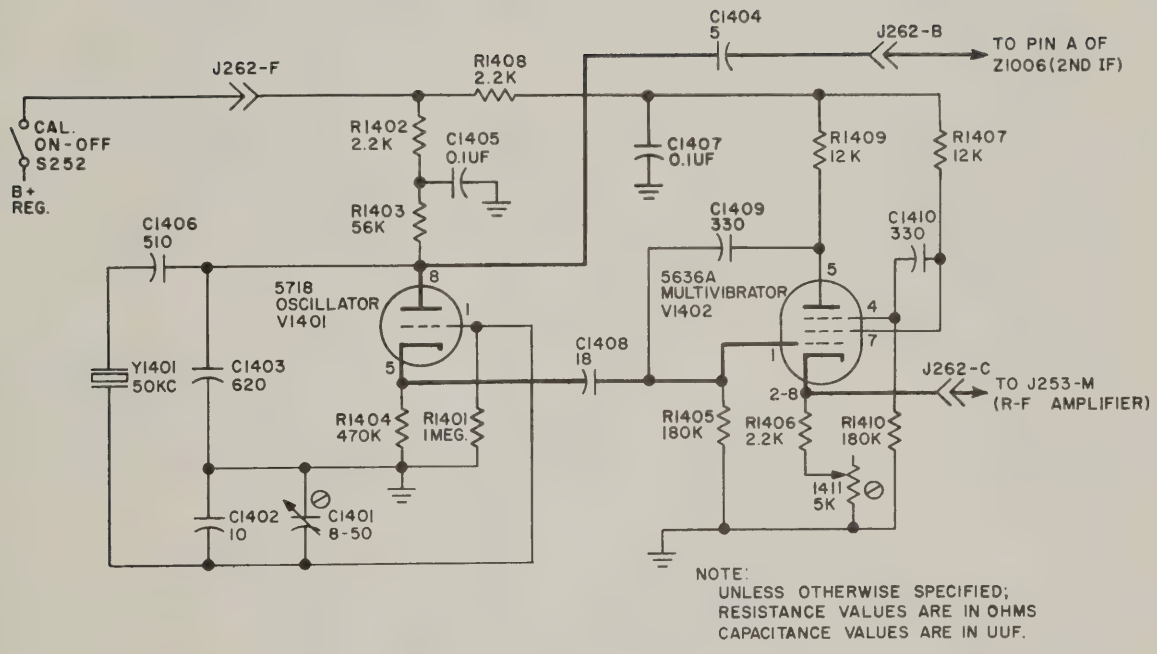


Figure 4–10. Crystal Calibrator Circuit, Simplified Schematic Diagram

SECTION 5
TROUBLE-SHOOTING

5–1. GENERAL.

Trouble-shooting techniques are employed when a partial or complete equipment failure occurs. If it is determined that this failure is within the receiver, a preliminary inspection should be performed before attempting trouble-shooting procedures. In many instances, the cause of the trouble can be located by the type of inspection, thus avoiding time-consuming trouble-shooting procedures.

Should preliminary inspection fail to uncover the defective part, systematic trouble-shooting techniques must be employed to effectively determine the cause of the trouble. It is rarely possible to observe a malfunction and diagnose the cause immediately. More often it is necessary to perform a sequence of checks, observations, and voltage and resistance measurements before the cause of the malfunction is discovered.

This section contains two types of trouble-shooting charts: an overall trouble-shooting chart, which is used to isolate the trouble to a subassembly, and a functional trouble-shooting chart which is used to isolate a faulty plug-in board or plug-in insert. Each trouble-shooting table contains a system of test points which are used to identify voltage or resistance measurement points and signal injection points. Major test points are indicated by an encircled Arabic numeral enclosed in a star (1). These test points are used to identify signal injection points when isolating faulty subassemblies, and for power measurements, when determining if the power supply is operative. Minor test points are indicated by encircled capital leters (A) (A1). These test points are used to identify signal injection points of plug-in units.

The trouble-shooting charts contained in this section make several assumptions, as follows:

a. All external equipment is operative.

b. All fuses and pilot lamps are good. (Refer to paragraph 3–5.)

c. All connectors are secure. (Refer to preliminary check, paragraph 5–3*a.*)

d. All intraconnecting wiring is good.

5–2. TEST EQUIPMENT AND SPECIAL TOOLS.

Table 5–1 lists the test equipment required to trouble-shoot the receiver. No special tools are required for trouble-shooting.

5–3. OVERALL TROUBLE SHOOTING.

a. PRELIMINARY CHECK. — Before proceeding with trouble-shooting, a preliminary inspection of the receiver should be made as follows:

(1) Be certain all front panel controls and switches are set as follows: CAL. ON-OFF switch in the OFF position, OPERATE-STANDBY switch in the OPERATE position, and the GAIN control set at mid position. Note that set noise will be apparent on TUNING meter and in audio output varying with GAIN control setting if equpiment is operating properly.

(2) Check all front panel controls and switches for positive operation.

(3) Check all fuses and panel indicators. (Refer to table 3–2 for symptoms of defective fuses and indicator lamps, and to figure 3–2 for location of fuses.) Table 5–2 lists certain trouble indications that can be localized to a subassembly by observing front panel indicators.

b. SYSTEM TROUBLE-SHOOTING CHART. — The system trouble-shooting chart, table 5–3, is used to localize a trouble to a defective subassembly. The method used is signal injection working back from the audio subassembly to the antenna. When the faulty subassembly is located, reference should be made to a functional trouble-shooting chart (tables 5–4 through 5–13). When using the system trouble-shooting chart, reference should be made to the overall functional block diagram, figure 4–1, and to the overall schematic diagram, figure 6–30. (In addition, refer to figure 5–1 for a primary power distribution diagram and to figures 5–2 and 5–3 for the physical locations of the test points referenced in table 5–3.)

5–4. FUNCTIONAL SECTION TROUBLE-SHOOTING.

a. PRELIMINARY CHECK. — The preliminary checks to be performed before trouble-shooting the receiver are the same as those listed in paragraph 5–3*a.*

b. CONTROL SETTINGS.—All control settings required during functional trouble-shooting are contained in the respective trouble-shooting chart.

c. FUNCTIONAL SECTION TROUBLE-SHOOTING CHARTS.—The functional section trouble-shooting charts, tables 5–4 through 5–13, are used to isolate a fault to a particular circuit within a faulty subassembly. Signal injection plus voltage and resistance measurements are used to isolate the faulty parts. In

addition to the voltage and resistance measurement diagrams (figures 5–4 through 5–7), figures 5–1 through 5–3 and 6–30 are also available as an aid in isolating the defective part.

NOTE

All voltage measurements with respect to chassis ground can be made without disassembly of the set.

5–5. TYPICAL TROUBLES.

Table 5–14 contains typical troubles encountered in receivers together with the nature and symptoms of the troubles.

5–6. LOCATION OF PARTS.

A part, when reference designation is known, can be located by referring to the Maintenance Parts List in the locating function column of table 7–1.

5–7. LUBRICATION.

Certain parts of the receiver must be lubricated at specified intervals to avoid equipment breakdown. Tables 5–15 through 5–18 list the items to be lubricated, type of lubricant to be used, method of application, and time interval for lubrication. Figures 5–8 through 5–11 show location of parts to be lubricated.

TABLE 5–1. TEST EQUIPMENT REQUIRED FOR TROUBLE-SHOOTING

NAME	NOMENCLATURE	ALTERNATE
Multimeter	AN/PSM–4 series	TS–352/U
Electronic multimeter	AN/USM–34 series	ME–25/U series
R-F signal generator set	AN/URM–25 series	
Audio oscillator	TS–382/U series	Model LAJ
Insulation test set	AN/PSM–2	Model OCW

TABLE 5–2. PRELIMINARY TROUBLE SHOOTING CHART USING FRONT PANEL INDICATORS

FRONT PANEL INDICATION	PROBABLE TROUBLE
With POWER ON-OFF switch in ON position dial lamps light; power lamp does not light.	Power supply subassembly defective. Refer to step 1, table 5–13.
Power lamp lights, dial lamps do not light.	Check dimmer control.
Neither dial lights nor pilot lamps light.	Power supply subassembly or line filters defective. Refer to step 1, table 5–3.
With OPERATE-STANDBY switch in OPERATE position and headphone inserted in PHONES jack, TUNING meter M251 indicates, OUTPUT meter does not indicate, and no signal is audible in headset.	Audio subassembly defective. Refer to step 1, table 5–4.
TUNING meter M251 and OUTPUT meter M252 do not indicate; no signals are audible.	Any subassembly between antenna and 2nd i-f may be defective. Refer to step 2, table 5–3.
TUNING meter M251 and OUTPUT meter M252 indicate; signals are only audible in bands 2, 3, and 5.	First i-f subassembly defective. Refer to step 1, table 5–6.
F.S.K. or A1 signals are indicated on TUNING meter M251, and not on OUTPUT meter M252, and are not audible.	Second i-f subassembly or BFO subasembly defective. Refer to step 6, table 5–3.
F.S.K. signal is indicated on TUNING meter M251 when RECEPTION switch is set to F.S.K., but is not indicated on OUTPUT meter M252 or audible.	Check OUTPUT potentiometer R257B. If R257B is good, proceed to step 7, table 5–4.

TABLE 5–2. PRELIMINARY TROUBLE SHOOTING CHART USING FRONT PANEL INDICATORS (Cont.)

FRONT PANEL INDICATION	PROBABLE TROUBLE
TUNING meter M251 indicates A1 signals, and OUTPUT meter M252 does not, and signals are not audible when RECEPTION switch is set to A1 SHARP.	Audio subassembly defective. Refer to step 6, table 5–4.
TUNING meter M251 indicates and OUTPUT meter M252 does not. No signals are audible.	Audio subassembly defective. Refer to step 9, table 5–4.
TUNING meter M251 and OUTPUT meter M252 do not indicate; no signals are audible when RECEPTION switch is set to A2.	Second i-f subassembly defective. Refer to step 1, table 5–5.
No signals are received in one band only.	Oscillator, mixer, r-f, or antenna preamplifier defective. Refer to step 3, table 5–3.
TUNING meter M251 indicates and OUTPUT meter M252 does not, and signals are audible.	OUTPUT meter, OUTPUT switch, or associated resistor R254, R255, R259, R260, or R264 defective. Check and replace defective part.
TUNING meter M251 and OUTPUT meter M252 indicate, and signals are present at the 600-ohm, balanced output (J1701, A and B; J1702, A and B) but no signals are present at headset.	LEVEL potentiometer R258 defective.
TUNING meter M251 and OUTPUT meter M252 indicate and signals are heard in headset but not present at 600-ohm, balanced output (J1701, A and B; J1702, A and B).	Audio filter Z1703 defective.
Tuning and OUTPUT meters indictae and signal is audible. No signal is present at i-f output jack.	Check Z1014 by performing voltage and resistance measurements for V1007 in acordance with figure 5–6. Replace defective part.
With CAL. ON-OFF switch S252 in ON position, and tuning dial rotated throughout band, no beat notes are heard.	Crystal calibrator subasembly is defective. Refer to step 1, table 5–11.

TABLE 5–3. RADIO RECEIVING SET AN/SRR–11A, SYSTEM TROUBLE SHOOTING CHART

STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
1	① Figures 5–2 and 6–30	Check for presence of voltage at test point.	Meter should indicate correct voltage.	If indication is normal, proceed to step 3, table 5–13. If indication is abnormal, check filter Z1702, POWER ON-OFF switch S251, and link O1601.
2	② Figures 5–3. and 6–30	Set RECEPTION switch to A2 position. Connect r-f signal generator set AN/URM–25 between test point and ground. Tune signal generator to 200 kc. Adjust signal generator output level to 15 microvolts.	TUNING meter M251 and OUTPUT meter M252 should indicate and signals should be audible in headset.	If neither meter indicates and signals are not audible, for A2 reception only, proceed to step 1, table 5–5. If no indications are present for any type of reception, proceed to step 3, table 5–5. If indications are normal, proceed to step 3.

TABLE 5-3. RADIO RECEIVING SET AN/SRR-11A, SYSTEM TROUBLE SHOOTING CHART (Cont.)

STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
3	(Q) Figures 5-3 and 6-30	Connect r-f signal generator set AN/URM-25 between test point and ground. *a.* Set signal generator frequency to 30 kc (unmodulated). Adjust signal generator output level to 120 microvolts. Place receiver band selector to band 1 and set tuning dial to 30 kc. *b.* Set signal generator to 200 kc (unmodulated). Adjust signal generator output level to 120 microvolts.	*a.* TUNING meter M251 and OUTPUT meter M252 should indicate and signal should be audible in headset.	*a.* If both meters indicate and signals are audible, proceed to step 4. If neither meter indicates and signals are not audible, proceed to step *b*. *b.* If neither meter indicates and signals are not audible, proceed to step 1, table 5-8. If both meters indicate and signal is audible, proceed to step 1, table 5-7.
4	(S) Figures 5-3 and 6-30	Connect r-f signal generator set AN/URM-25 to test point. Tune signal generator to 30 kc. Adjust signal generator output level to a minimum value.	TUNING and OUTPUT meters M251 and M252 should indicate and signal should be heard in headset.	If neither meter indicates and signals are not audible, proceed to step 1, table 5-9. If both meters indicate and signals are audible, proceed to step 5.
5	(U) Figures 5-3 and 6-30	Connect r-f signal generator set AN/URM-25 between test point and ground. Tune signal generator to 30 kc. Adjust signal generator output level to a minimum value.	TUNING and OUTPUT meters M251 and M252 should indicate, and signal should be heard in headset.	If neither meter indicates and signals are not audible, proceed to step 1, table 5-10.
6	(3) Figures 5-2 and 6-30	Connect r-f signal generator set AN/URM-25 between test point and ground. Tune signal generator to 201 kc and adjust output level to 1 volt. Set RECEPTION switch to F.S.K. on either A1 position.	OUTPUT meter M252 should indicate and signal should be heard in headset.	If OUTPUT meter M252 indicates and signal is audible, proceed to step 1, table 5-12. If OUTPUT meter M252 does not indicate and signal is not audible, proceed to step 1, table 5-5.

TABLE 5-4. AUDIO SUBASSEMBLY, TROUBLE SHOOTING CHART

STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
1	(A) Figures 5-2 and 6-30	Tune audio oscillator TS-382/U to 1 kc. Inject 1 kc signal between test point and ground.	OUTPUT meter M252 should indicate and signal should be audible in headset.	If meter indicates and signal is audible, proceed to step 2. If meter does not indicate and signal is not audible, perform voltage and resistance measurements for V1109 in accordance with figure 5-4. Replace defective part.
2	(B) Figures 5-2 and 6-30	Tune audio oscillator TS-382/U to 1 kc. Inject signal between test point and ground.	OUTPUT meter M252 should indicate and signal should be audible in headset.	If meter indicates and signal is audible, proceed to step 3. If meter does not indicate and signal is not audible, perform voltage and

TABLE 5–4. AUDIO SUBASSEMBLY, TROUBLE SHOOTING CHART (Cont.)

STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
				resistance measurements for V1108 in accordance with figure 5–4. Replace defective part.
3	(C) Figures 5–2 and 6–30	Tune audio oscillator TS–382/U to 1 kc. Inject 1 kc signal between test point and ground using an isolating capacitor.	OUTPUT meter M252 should indicate and signal should be audible in headset.	If meter indicates and signal is audible, proceed to step 4. If meter does not indicate and signal is not audible, perform voltage and resistance measurements for V1106 or V1107 in accordance with figure 5–4. Replace defective part.
4	(D) Figures 5–2 and 6–30	Tune audio oscillator TS–382/U to 1 kc. Inject 1 kc signal between test point and ground using an isolating capacitor.	OUTPUT meter M252 should indicate and signal should be audible in headset.	If meter indicates and signal is audible, proceed to step 5. If meter does not indicate and signal is not audible, perform voltage and resistance measurements for V1105 in accordance with figure 5–4. Replace defective part.
5	(E) Figures 5–2 and 6–30	Set audio oscillator TS–382/U to 1 kc. Inject 1 kc signal between test point and ground.	OUTPUT meter M252 should indicate and signal should be audible in headset.	If meter indicates and signal is audible, proceed to step 6. If meter does not indicate, and signal is not audible, perform voltage and resistance measurements for V1103 in accordance with figure 5–4. Replace defective part.
6	(F) Figures 5–2 and 6–30	Set audio oscillator TS–382/U to 1 kc. Inject 1 kc signal between test point and ground.	OUTPUT meter M252 should indicate and signal should be audible in headset.	If meter indicates and signal is audible, perform voltage and resistance measurements for V1102 in accordance with figure 5–4. Replace defective part. If meter does not indicate and no signal is audible, check S1101B.
7	(G) Figures 5–3 and 6–30	Tune audio oscillator TS–382/U to 1 kc. Inject signal between test point and ground. Set RECEPTION control to F.S.K. position.	OUTPUT meter M252 should indicate and signal should be audible in headset.	If meter indicates and signal is audible, proceed to step 8. If meter does not indicate and signal is not audible, check contacts of S1101A.
8	(H) Figures 5–2 and 6–30	Set RECEPTION control to A1 BROAD or A1 SHARP position. Inject 1 kc signal at test point.	OUTPUT meter M252 should indicate and signal should be audible in headset.	If signal is not audible and meter does not indicate, check contacts of S1101A. If meter does not indicate and signal is not audible when RECEPTION control is set to A1 SHARP only, check appropriate S1101B contacts and bandpass filter Z1110.

TABLE 5-4. AUDIO SUBASSEMBLY, TROUBLE SHOOTING CHART (Cont.)

STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
9	(I) Figures 5-2 and 6-30	Set RECEPTION control to A2 position. Inject 1 kc signal at test point.	OUTPUT meter M252 should indicate and signal should be audible in headset.	If meter does not indicate and signal is not audible, check contacts of S1101A and perform voltage and resistance measurements for V1101 in accordance with figure 5-4. Replace defective part.

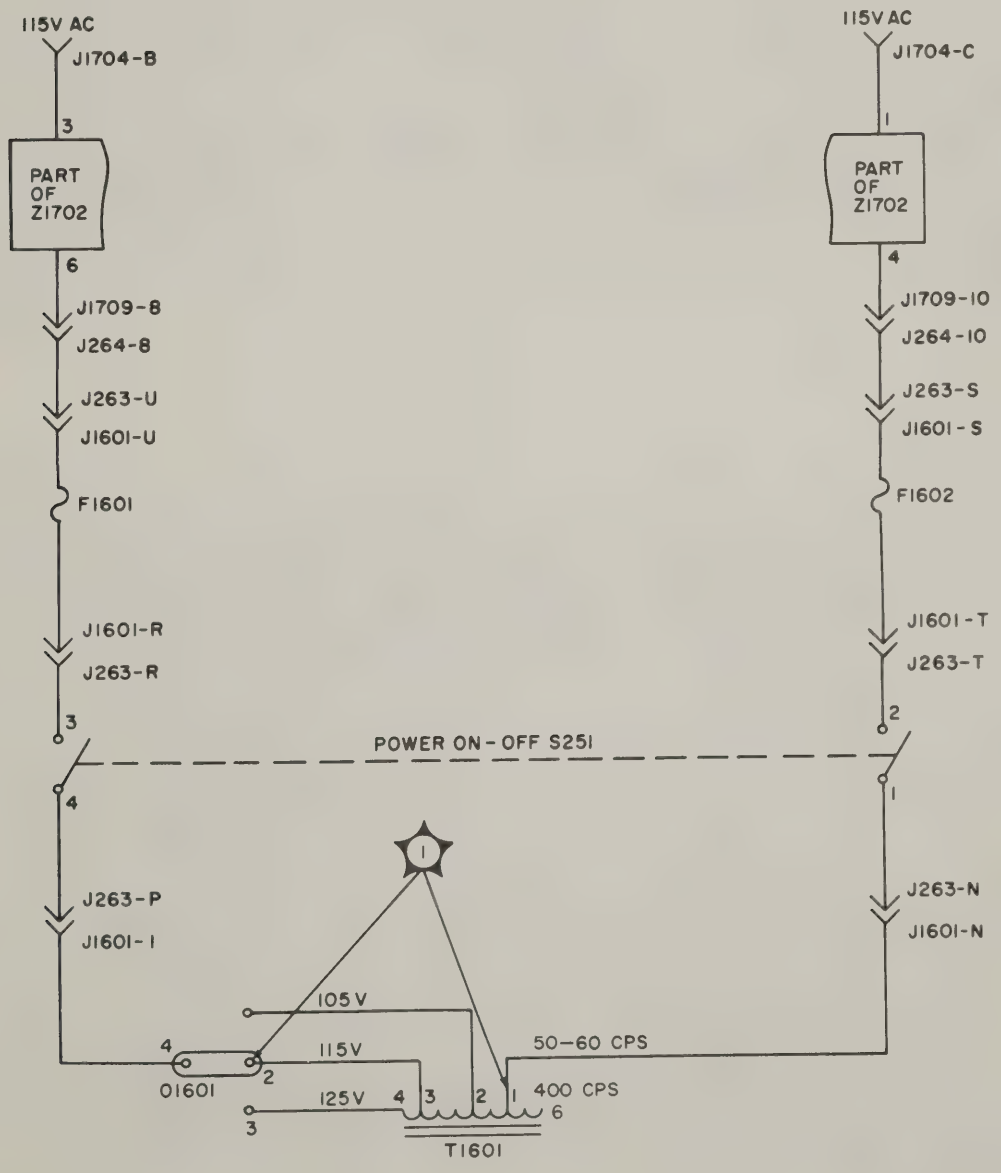


Figure 5-1. Primary Power Distribution, Schematic Diagram

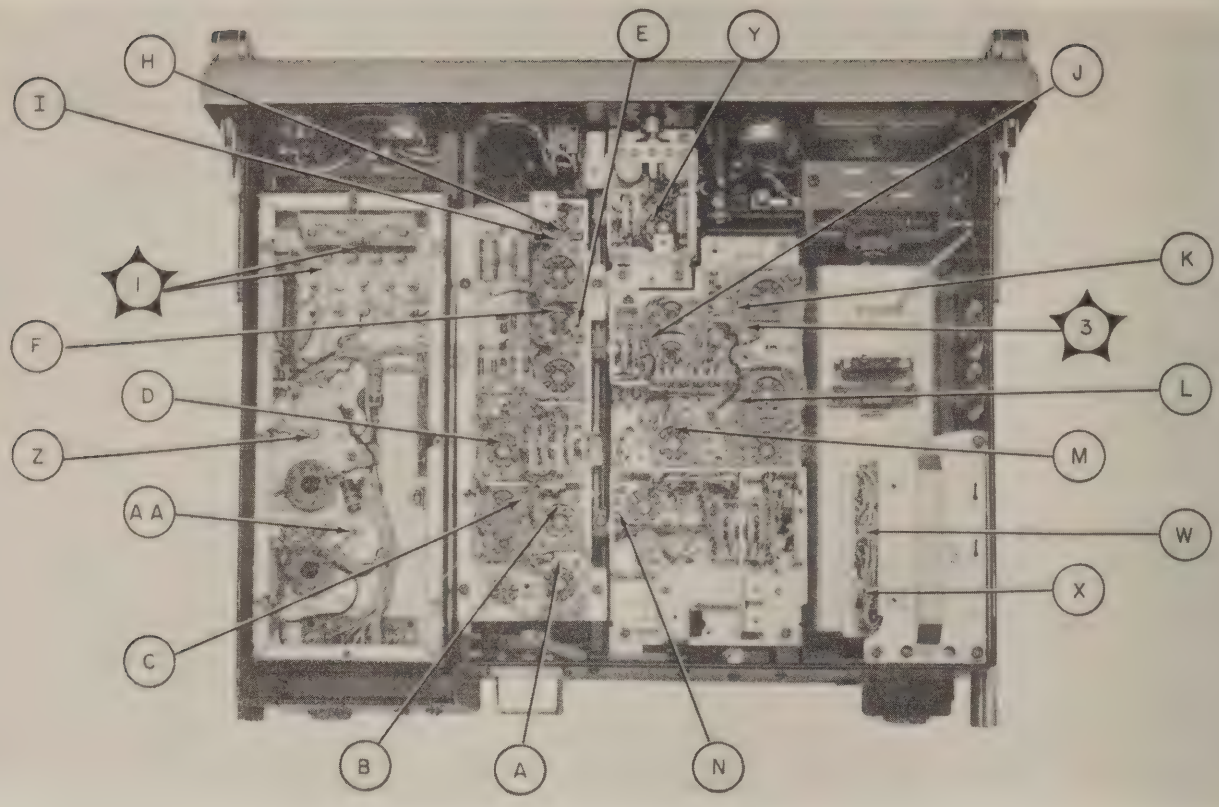


Figure 5–2. Top View, Test Point Location

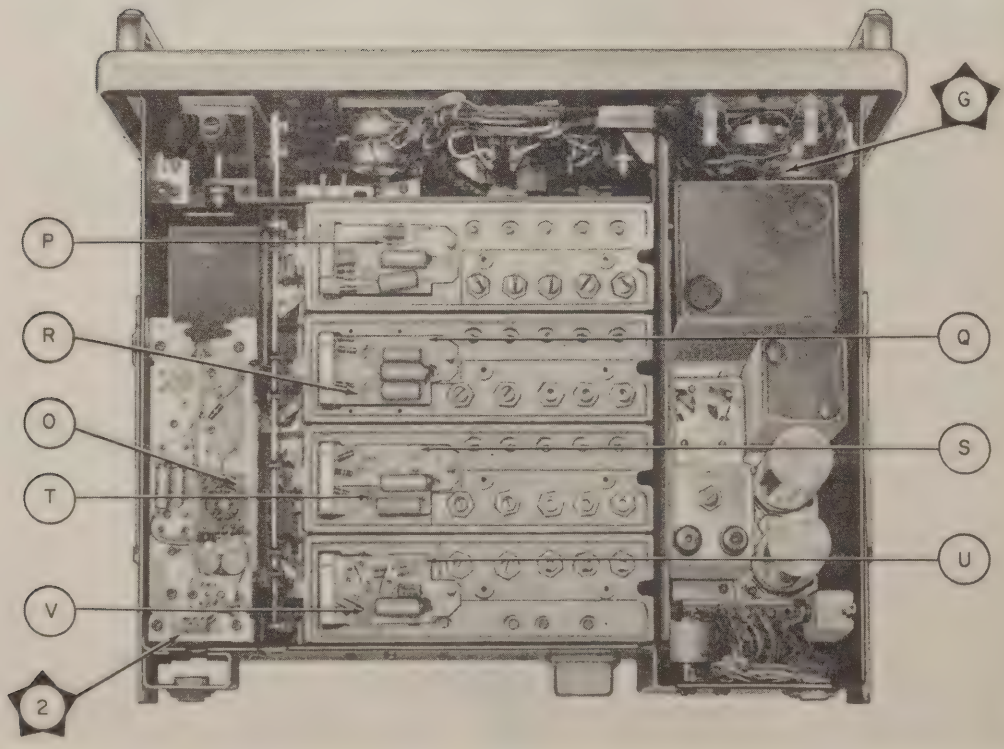
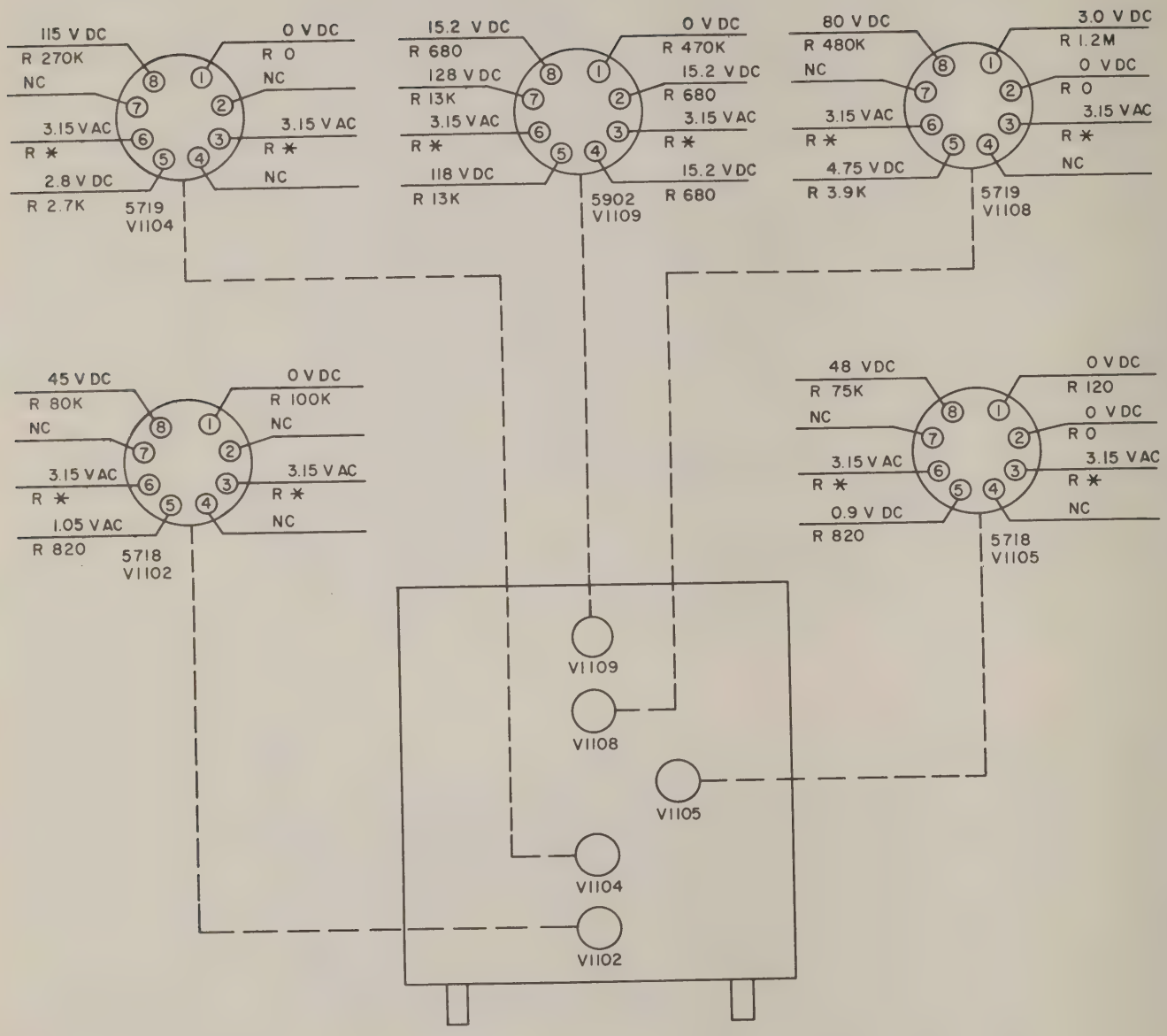


Figure 5–3. Bottom View, Test Point Location

TABLE 5–5. SECOND I-F SUBASSEMBLY, TROUBLE SHOOTING CHART

STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
1	(J) Figures 5–2 and 6–30	Tune r-f signal generator set AN/URM–25 to 200 kc (modulated) and inject signal between test point and ground.	TUNING meter M251 and OUTPUT meter M252 should indicate and signal should be heard in headset.	If neither meter indicates and no signal is audible, check appropriate S1003 contacts and perform voltage and resistance measurements for V1005 in accordance with figure 5–6. Replace defective part.
2	(K) Figures 5–2 and 6–30	Tune audio oscillator TS–382/U to 1 kc and inject signal between test point and ground.	OUTPUT meter M252 should indicate and signal should be heard in headset.	If meter does not indicate and signal is not audible, check C1001, R1032, and appropriate S1003 contacts. Replace defective part. If OUTPUT meter M252 indicates and signal is audible in headset, perform voltage and resistance measurements for V1004 in accordance with figure 5–6. Replace defective part.
3	(L) Figures 5–2 and 6–30	Tune signal generator AN/URM–25 to 200 kc (modulated). Inject signal between test point and ground.	TUNING meter M251 and OUTPUT meter M252 should indicate and signal should be heard in headset.	If neither meter indicates and signal is not audible, check parts in Z1011 for shorted or open condition and perform voltage and resistance measurements for V1003 in accordance with figure 5–6. Replace defective part. If meters do indicate and signal is audible, proceed to step 4.
4	(M) Figures 5–2 and 6–30	Tune signal generator to 200 kc (modulated). Inject signal between test point and ground.	TUNING meter M251 and OUTPUT meter M252 should indicate and signal should be heard in headset.	If meters do not indicate and no signal is audible, check parts in Z1007 and GAIN potentiometer R251B and perform voltage and resistance measurements for V1002 in accordance with figure 5–6. **Note** R251B can be checked by measuring resistance between terminal E of Z1006 and ground. Replace defective part. If both meters indicate and signal is audible, proceed to step 5.
5	(N) Figures 5–2 and 6–30	Tune signal generator to 200 kc (modulated). Inject signal between test point and ground.	TUNING meter M251 and OUTPUT meter M252 should indicate and signal should be heard in headset.	If meters indicate, check S1001, S1002, band-pass filter Z1015, and parts in Z1005. If meters do not indicate, and signal is not audible, perform voltage and resistance measurements for V1002 in accordance with figure 5–6. Replace defective part.



NOTES:

1. FOR RESISTANCE MEASUREMENTS, UNIT DISCONNECTED FROM RECEIVER.
2. READINGS TAKEN WITH A MULTIMETER HAVING A RESISTANCE OF 1 000 AND 20,000-OHMS-PER-VOLT FOR AC AND DC MEASUREMENTS, RESPECTIVELY.
3. KEY TO SYMBOLS;
   - R INDICATES DC RESISTANCE WITH EXTERNAL CABLES DISCONNECTED.
   - * INDICATES RESISTANCE LESS THAN ONE OHM.

Figure 5–4. Audio Amplifier, Voltage and Resistance Measurements

TABLE 5-6. FIRST I-F SUBASSEMBLY, TROUBLE SHOOTING CHART

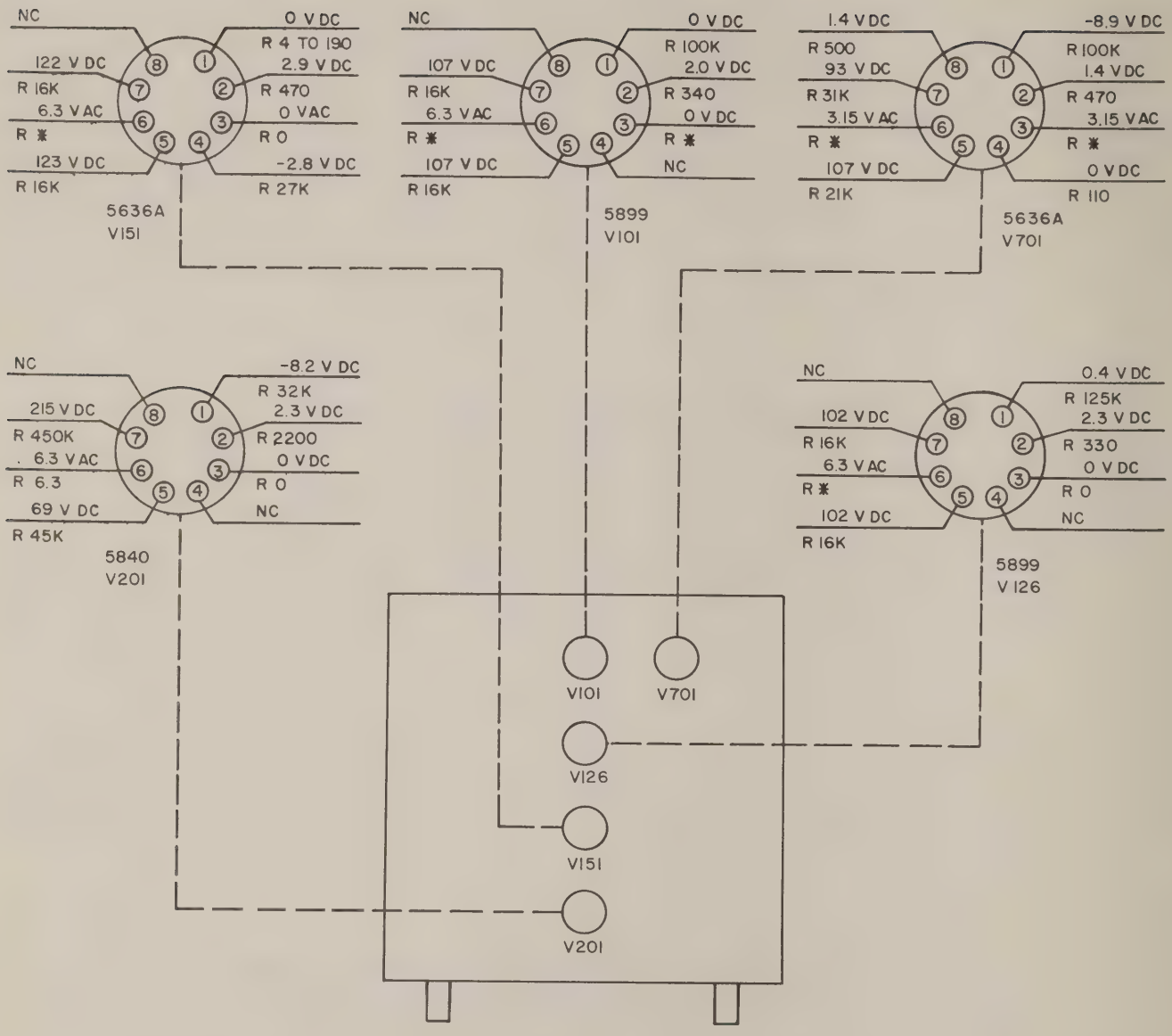
STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
1	(O) Figures 5-3 and 6-30	Connect multimeter between test point and ground and set band selector switch for band 1 or band 4.	Voltage present should be as indicated in figure 5-6.	If reading is abnormal, check S702 contacts, T703, resistor R705, C712, contacts of S701, continuity of Z702 and associated components. If voltage is correct, perform voltage and resistance measurements for V701 in accordance with figure 5-6. Replace defective part.

TABLE 5-7. OSCILLATOR SUBASSEMBLY, TROUBLE SHOOTING CHART

STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
1	(P) Figures 5-3 and 6-30	Connect electronic multimeter AN/USM-34 between test point and ground. Rotate band selector switch (slowly).	Small negative voltage should be indicated in each of five band switch positions.	If a positive voltage is indicated in all five bands, perform voltage and resistance measurements for V201 in accordance with figure 5-5. Replace defective part. If a positive voltage is read for any one of the five bands, check appropriate coil, capacitors, and contacts of S201A and S201B.

TABLE 5-8. MIXER SUBASSEMBLY, TROUBLE SHOOTING CHART

STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
1	(Q) Figures 5-3 and 6-30	Set r-f signal generator set AN/URM-25 to frequency corresponding to receiver frequency. Connect signal generator between test point and ground.	TUNING meter M251 and OUTPUT meter M252 should indicate and signal should be audible in headset.	If signal is indicated and audible, check appropriate transformer T151 through T155, and associated capacitors. If signal is not indicated and no signal is audible, proceed to step 2.
2	(R) Figures 5-3 and 6-30	Connect test leads of electronic multimeter AN/USM-34 between test point and ground.	Voltage should be present as indicated in figure 5-5.	If voltage is not present, check Z702, R701, C711, and S701 in 1st i-f amplifier. Replace defective part. If voltage is present, perform voltage and resistance measurements for V151 in accordance with figure 5-5. Replace defective part.



NOTES:
1. FOR RESISTANCE MEASUREMENTS, UNITS DISCONNECTED FROM RECEIVER.
2. READINGS TAKEN WITH A MULTIMETER HAVING A RESISTANCE OF 1 000 AND 20,000-OHMS-PER-VOLT FOR AC AND DC MEASUREMENTS, RESPECTIVELY.
3. KEY TO SYMBOLS;
   R INDICATES DC RESISTANCE WITH EXTERNAL CABLES DISCONNECTED.
   ✱ INDICATES RESISTANCE LESS THAN ONE OHM.

Figure 5–5. Antenna Preamplifier, R-F Amplifier, Mixer, Oscillator, and First I-F Amplifier, Voltage and Resistance Measurements

TABLE 5-9. R-F AMPLIFIER SUBASSEMBLY, TROUBLE SHOOTING CHART

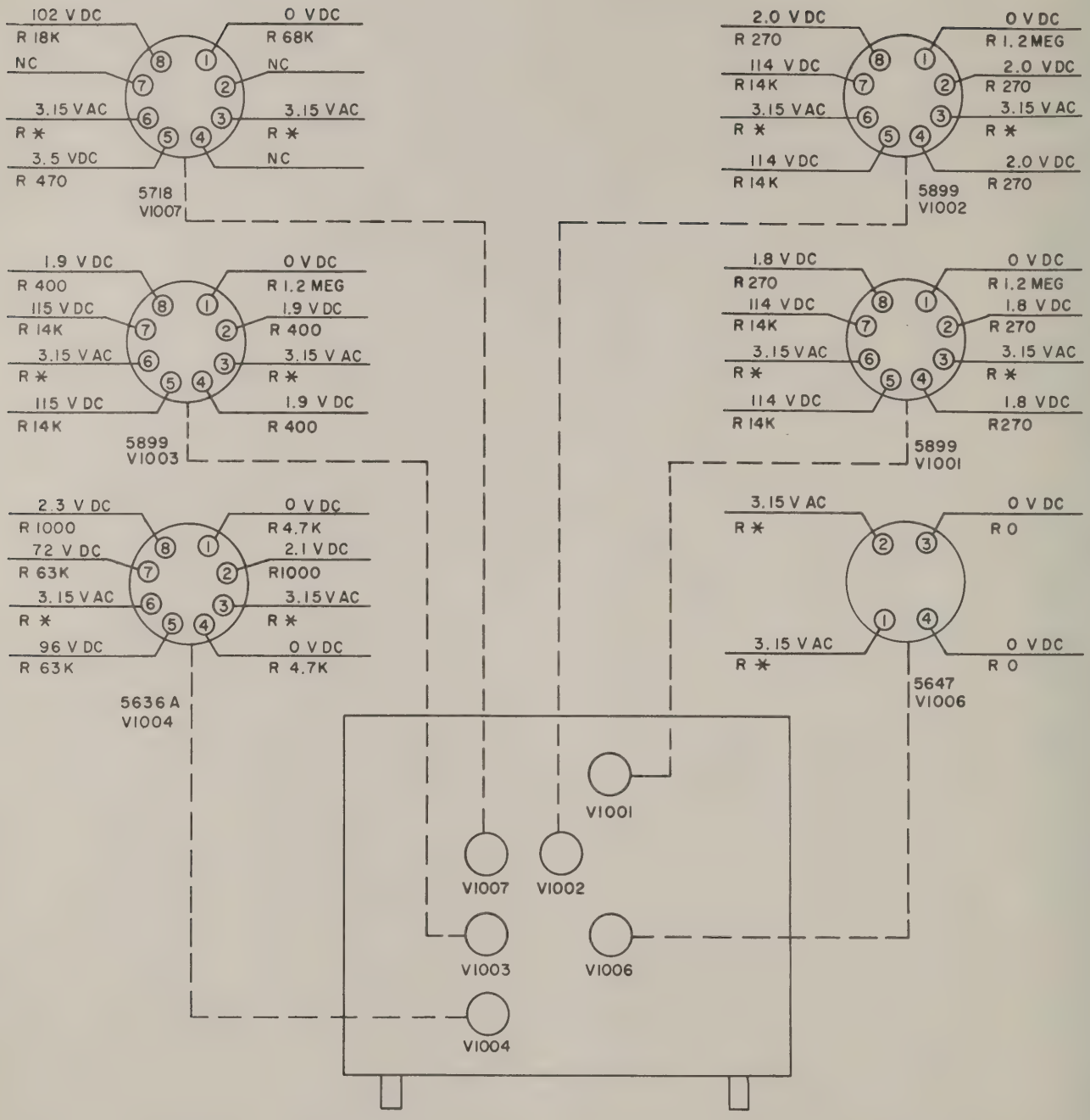
STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
1	(S) Figures 5-3 and 6-30	Set r-f signal generator set AN/URM-25 frequency to correspond with receiver dial frequency. Connect signal generator between test point and ground.	TUNING meter M251 and OUTPUT meter M252 should indicate and signal should be audible in headset.	If signal is indicated and audible, check appropriate transformer T126 through T130 secondary wiring and associated capacitors. If signal does not indicate and signal is not audible, proceed to step 2.
2	(T) Figures 5-3 and 6-30	Connect test leads of multimeter between test point and ground.	Voltage should be present as indicated in figure 5-5.	If voltage is not present, check appropriate transformer T151 through T155 and contacts of S151A on mixer subassembly. If voltage is present, perform voltage and resistance measurements for V126 in accordance with figure 5-5. Replace defective part.

TABLE 5-10. ANTENNA PREAMPLIFIER SUBASSEMBLY, TROUBLE SHOOTING CHART

STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
1	(U) Figures 5-3 and 6-30	Set r-f signal generator set AN/URM-25 frequency to correspond with receiver dial frequency. Connect signal generator between test point and ground.	TUNING meter M251 and OUTPUT meter M252 indicate and signal is heard in headset.	If signal is audible and indicated, check appropriate transformer T101 through T105 and associated resistors. If signal is not audible and not indicated, proceed to step 2.
2	(V) Figures 5-3 and 6-30	Connect test leads of electronic multitester between test point and ground.	Voltage should be present as indicated in figure 5-5.	If voltage is not present, check S126, appropriate transformers T126 through T130 and associated capacitors on r-f amplifier subassembly.

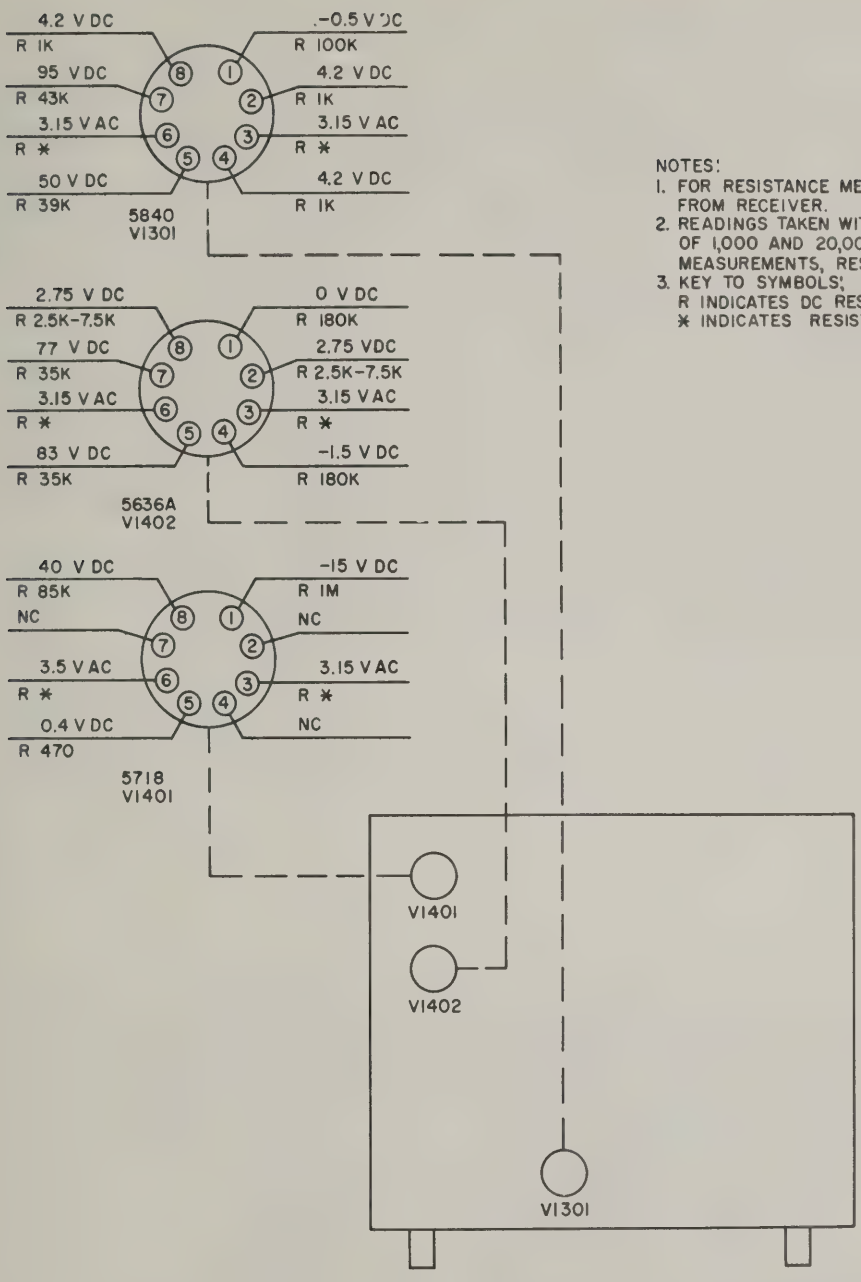
TABLE 5-11. CRYSTAL CALIBRATOR SUBASSEMBLY, TROUBLE SHOOTING CHART

STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
1	(W) Figures 5-2 and 6-30	Connect electronic multimeter AN/USM-34 between test point and ground.	Voltage present should be in accordance with figure 5-7.	If reading is abnormal, check resistors R1402, R1403, and capacitors C1405 and C1403. If reading is normal, perform voltage and resistance measurements for V1401 in accordance with figure 5-7. Replace defective part. If readings are normal, proceed to step 2.
2	(X) Figures 5-2 and 6-30	Connect multimeter between test point and ground.	Voltage present should be in accordance with figure 5-7.	If reading is abnormal, check resistors R1408, R1409 and capacitors C1407 and C1409. If reading is normal, perform voltage and resistance measurements for V1402 in accordance with figure 5-7. Replace defective part.



NOTES:
1. FOR RESISTANCE MEASUREMENTS, UNIT DISCONNECTED FROM RECEIVER.
2. READINGS TAKEN WITH A MULTIMETER HAVING A RESISTANCE OF 1000 AND 20,000 OHMS PER VOLT FOR AC AND DC MEASUREMENTS, RESPECTIVELY.
3. KEY TO SYMBOLS;
   R INDICATES DC RESISTANCE WITH EXTERNAL CABLE DISCONNECTED.
   * INDICATES RESISTANCE LESS THAN ONE OHM.

Figure 5–6. Second I-F Amplifier, Voltage and Resistance Measurements



NOTES:
1. FOR RESISTANCE MEASUREMENTS, UNIT DISCONNECTED FROM RECEIVER.
2. READINGS TAKEN WITH A MULTIMETER HAVING A RESISTANCE OF 1,000 AND 20,000-OHMS-PER-VOLT FOR AC AND DC MEASUREMENTS, RESPECTIVELY.
3. KEY TO SYMBOLS:
   R INDICATES DC RESISTANCE WITH EXTERNAL CABLES DISCONNECTED.
   * INDICATES RESISTANCE LESS THAN ONE OHM.

Figure 5-7. Crystal Calibrator, and Beat Frequency Oscillator, Voltage and Resistance Measurements

TABLE 5-12. BFO SUBASSEMBLY, TROUBLE SHOOTING CHART

STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
1	(Y) Figures 5-2 and 6-30	Place RECEPTION switch into A1 SHARP, A1 BROAD, or F.S.K. positions. Connect electronic multimeter AN/USM-34 between test point and ground.	Voltage present should be as indicated in figure 5-7.	If voltage is not present, check resistors R1301 and R1304, contacts of S1301 and capacitor C1305. If voltage is normal, perform voltage and resistance measurements for V1301 in accordance with figure 5-7. Replace defective part.

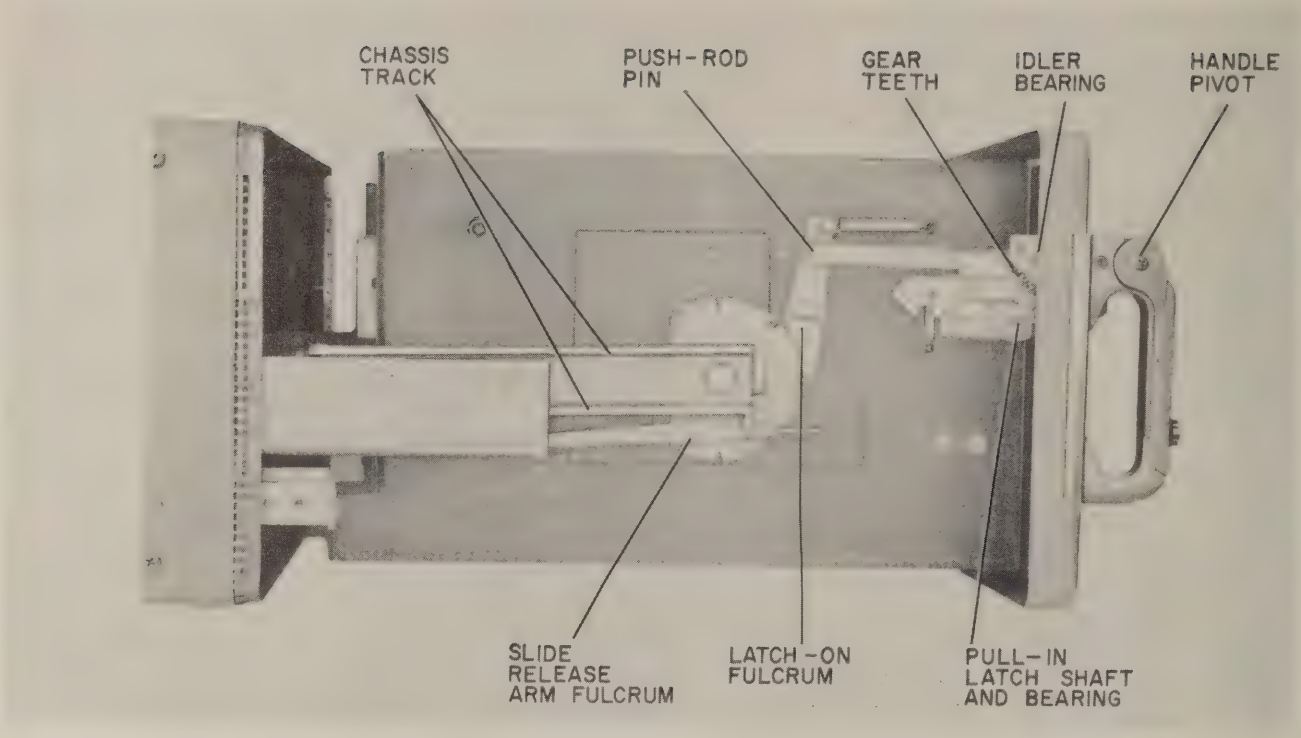


Figure 5–8. Lubrication Points on Chassis Positioning Mechanism

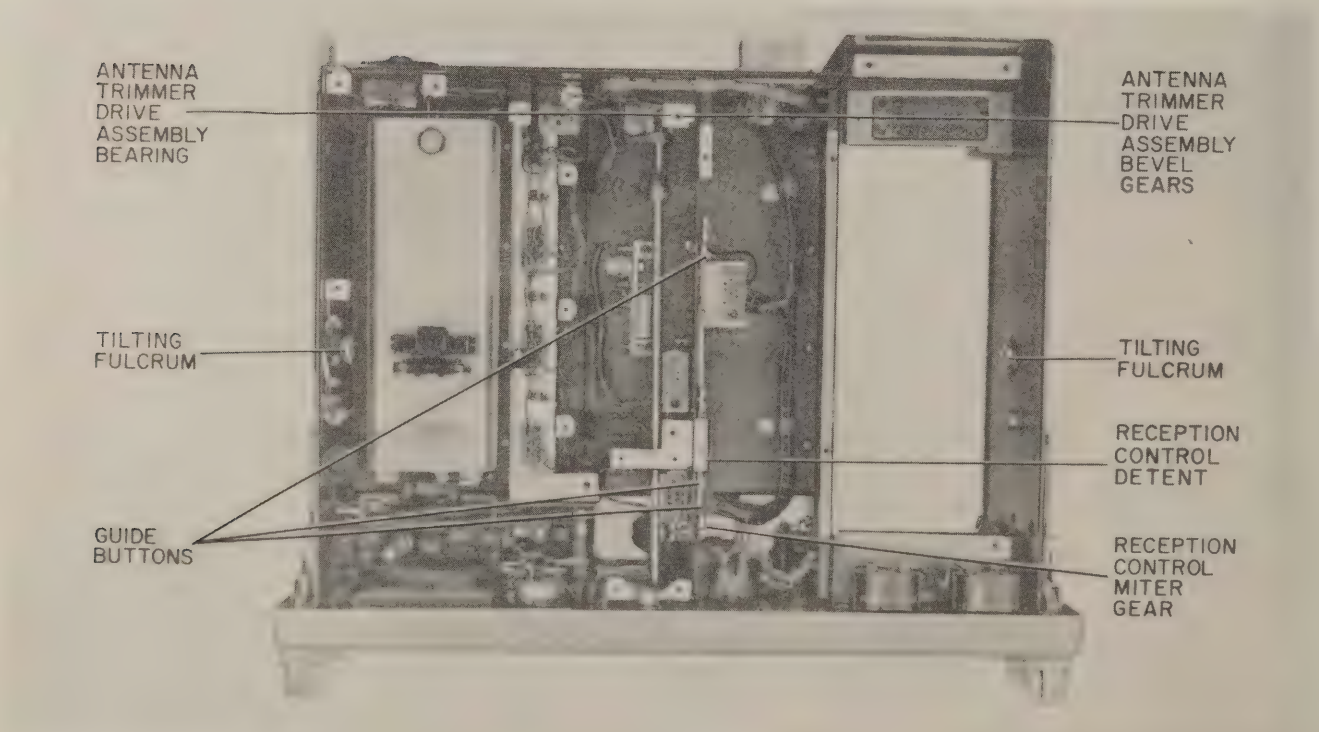


Figure 5–9. Lubrication Points on Top of Chassis

TABLE 5–13. POWER SUPPLY SUBASSEMBLY, TROUBLE SHOOTING CHART

STEP	TEST POINT	PRELIMINARY ACTION	NORMAL INDICATION	NEXT STEP
1	(Z) Figures 5–2 and 6–30	Connect test leads of electronic multimeter AN/USM–34 between test point and ground.	Meter should read approximately 140-volts dc.	If voltage is not present, check L1601A, C1602, CR1601, CR1602, CR1603 and CR1604. If voltage is normal, proceed to step 2.
2	(AA) Figures 5–2 and 6–30	Connect test leads of multimeter between test point and ground.	Meter should indicate 120-volts dc.	If voltage is not present, check L1601B, R1604, and C1601.
3		Check continuity of T1601.	Meter should indicate low resistance.	If meter indicates an open circuit, replace T1601.

TABLE 5–14. TYPICAL TROUBLES

TROUBLE	NATURE OF TROUBLE	SYMPTOMS
Abnormal output.	Antenna link O101 or O102 improperly positioned.	Output unusually low.
	Primary power link O1601 improperly set.	
No output.	Primary power link O1601 improperly set.	Fuses F1601 and/or F1602 continuously blow.
No output.	Fuse F1601 or F1602 defective. Primary power link corroded or open.	No visual or audible output on any band. Neither power lamp nor DIAL lamp lights.
No output. Power lamp does not light.	Power supply subassembly defective or d-c short in any subassembly or chassis wiring.	No visual or audible output on any band. Power lamp does not light.
No output on one band.	Transformer, capacitors, resistors or switch contacts, in antenna preamplifier, r-f amplifier, mixer, or oscillator subassembly, associated with faulty channel defective.	No visual or audible output on one band only. DIAL lamp and power lamp light.
No calibration markers.	Crystal calibrator subassembly defective.	No calibration markers throughout range of receiver and no increase in reading of TUNING meter.
No output on bands 1 or 4.	Contacts of switch S701 or S702 or first i-f amplifier subassembly defective.	No audible or visual output on bands 1 or 4.
Abnormal output.	Receiver misaligned.	Abnormal output on all bands for all types of reception.

TABLE 5–15. LUBRICATION CHART FOR CHASSIS POSITIONING MECHANISM (SEE FIGURE 5–8)

ITEM	TYPE OF LUBRICANT	METHOD OF APPLICATION	TIME INTERVAL
Push-rod pin	14–0–20(ORD)	Apply two drops of oil.	Semi-annually
Idler bearing	14–0–20(ORD)	Apply two drops of oil.	Semi-annually

TABLE 5–15. LUBRICATION CHART OR CHASSIS POSITIONING MECHANISM (See Figure 5–8) (Cont.)

ITEM	TYPE OF LUBRICANT	METHOD OF APPLICATION	TIME INTERVAL
Handle pivot	MIL–G–3278*	Apply thin film of grease with brush.	Semi-annually
Gear teeth	MIL–G–3278*	Apply thin film of grease with brush.	Semi-annually
Pull-in latch shaft & bearing	14–0–20(ORD)	Apply two drops of oil.	Semi-annually
Latch-on fulcrum	14–0–20(ORD)	Apply two drops of oil.	Semi-annually
Slide release arm fulcrum	14–0–20(ORD)	Apply two drops of oil.	Semi-annually
Chassis track	MIL–G–3278*	Apply grease lightly with brush.	Semi-annually

*Formerly AN–G–25

TABLE 5–16. LUBRICATION CHART FOR TOP OF CHASSIS (SEE FIGURE 5–9)

ITEM	TYPE OF LUBRICANT	METHOD OF APPLICATION	TIME INTERVAL
Antenna trimmer drive assembly bearing	14–0–20(ORD)	Apply two drops of oil.	Semi-annually
Antenna trimmer drive assembly bevel gears	MIL–G–3278*	Apply grease lightly with brush.	Semi-annually
Reception control detent	MIL–G–3278*	Apply grease lightly with brush.	Semi-annually
Reception control miter gear	MIL–G–3278*	Apply grease lightly with brush.	Semi-annually
Guide buttons	MIL–G–3278*	Apply grease lightly with brush.	Semi-annually
Tilting fulcrum	14–0–20(ORD)	Apply two drops of oil.	Semi-annually

*Formerly AN–G–25

TABLE 5–17. LUBRICATION CHART FOR BOTTOM OF CHASSIS (SEE FIGURE 5–10)

ITEM	TYPE OF LUBRICANT	METHOD OF APPLICATION	TIME INTERVAL
Band switch rack guide buttons	MIL–G–3278*	Apply grease lightly with brush.	Semi-annually

*Formerly AN–G–25

TABLE 5–18. LUBRICATION CHART FOR TUNING DIAL (SEE FIGURE 5–11)

ITEM	TYPE OF LUBRICANT	METHOD OF APPLICATION	TIME INTERVAL
CAL. ADJUST shaft bearing	14–0–20(ORD)	Remove knob; apply two drops of oil.	Semi-annually
LAMPS shaft bearing	14–0–20(ORD)	Remove knob; apply two drops of oil.	Semi-annually
Lens arm bearing	14–0–20(ORD)	Apply two drops of oil.	Semi-annually
Tuning shaft bearing	14–0–20(ORD)	Remove main dial knob; apply two drops of oil.	Semi-annually
Idler shaft	14–0–20(ORD)	Apply two drops of oil.	Semi-annually

TABLE 5–18. LUBRICATION CHART FOR TUNING DIAL (See Figure 5–11) (Cont.)

ITEM	TYPE OF LUBRICANT	METHOD OF APPLICATION	TIME INTERVAL
Cam roller	14–0–20(ORD)	Apply two drops of oil.	Semi-annually
Dial bearing	14–0–20(ORD)	Apply two drops of oil.	Semi-annually
Stud interim	14–0–20(ORD)	Apply two drops of oil.	Semi-annually
Band switch shaft	14–0–20(ORD)	Apply two drops of oil.	Semi-annually
Bearing follower	14–0–20(ORD)	Apply two drops of oil.	Semi-annually
Sleeve bearing	14–0–20(ORD)	Apply two drops of oil.	Semi-annually
Band switch cam	MIL–G–3278*	Apply thin film of grease with brush.	Semi-annually
Detent wheel	MIL–G–3278*	Apply thin film of grease with brush.	Semi-annually
Tuning shaft gears	MIL–G–3278*	Apply grease lightly with brush.	Semi-annually

*Formerly AN–G–25

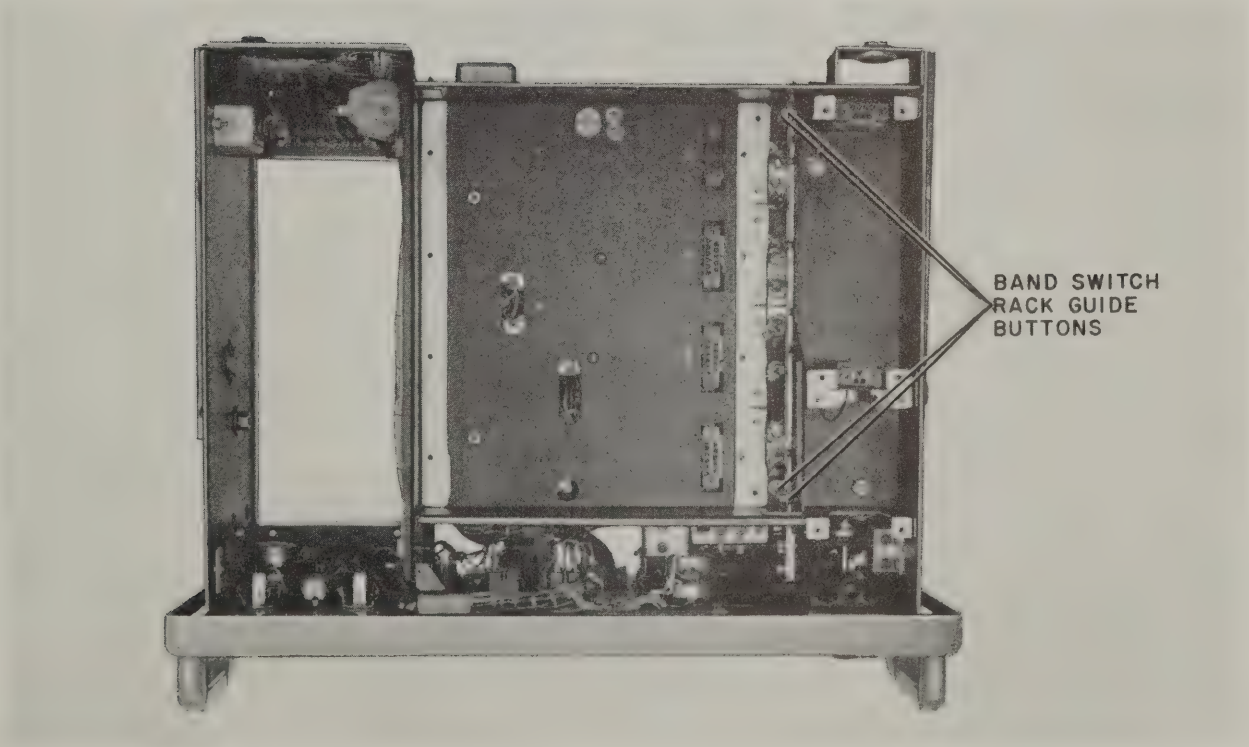


Figure 5–10. Lubrication Points on Bottom of Chassis

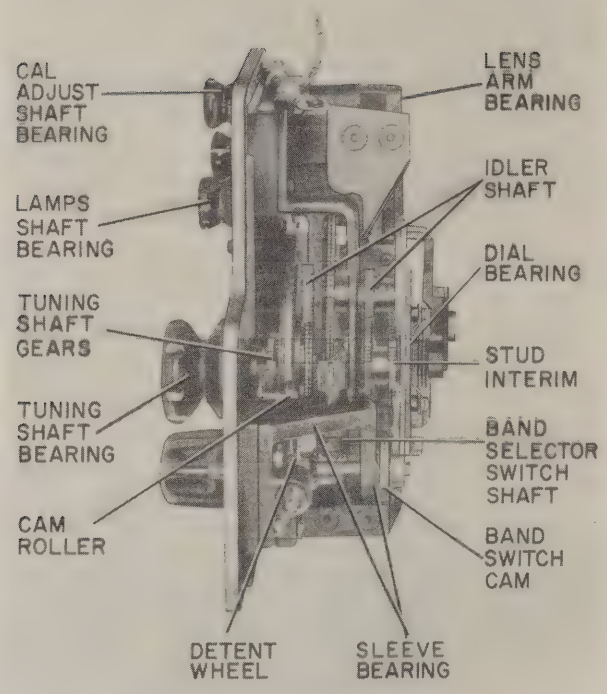


Figure 5–11. Lubrication Points on Tuning Dial

SECTION 6
REPAIR

6-1. FAILURE REPORT.

"Report each failure of the equipment, whether caused by a defective part, wear, improper operation, or an external cause. Use ELECTRONIC FAILURE REPORT form DD787. Each pad of the forms includes full instructions for filling out the forms and forwarding them to the Bureau of Ships. However, the importance of providing complete information cannot be emphasized too much. Be sure that you include the model designation and serial number of the equipment (from the equipment identification plate), the type number and serial number of the major unit (from the major unit identification plate), and the type number and reference designation of the particular defective part (from the technical manual). Describe the cause of the failure completely, continuing on the back of the form if necessary. Do not substitute brevity for clarity. And remember—there are two sides to the failure report—

"YOUR SIDE"

"Every FAILURE REPORT is a boost for you:
1. It shows that you are doing your job.
2. It helps make your job easier.
3. It insures available replacements.
4. It gives you a chance to pass your knowledge to every man on the team.

"BUREAU SIDE"

"The Bureau of Ships uses the information to:
1. Evaluate present equipment.
2. Improve future equipment.
3. Order replacements for stock.
4. Prepare field changes.
5. Publish maintenance data.

Always keep a supply of failure report forms on board. You can get them from the nearest Forms and Publications Supply Distribution Point."

6-2. TUNING AND ADJUSTMENT.

a. TEST EQUIPMENT AND SPECIAL TOOLS.—The test equipment required to tune and adjust the receiver are contained below. No special tools are required.

(1) Electronic Multimeter, ME-25/U or AN/USM-34 series

(2) Oscilloscope, OS-8/U, Model OBL or OBT series

(3) R-F Signal Generator Set, AN/URM-25

(4) Audio Oscillator, TS-382/A or higher, Navy Model LAJ series

(5) Heterodyne Frequency Meter, Navy Model LR series

(6) Two 1.0-microfarad capacitors.

(7) One 680 micromicrofarad capacitor.

(8) One 39 micromicrofarad capacitor.

(9) One jumper lead, six inches of number 22 wire.

b. CONTROL SETTINGS.—There are no predetermined control settings for the radio set alignment. Alignment of each stage requires particular control settings. Therefore control settings are given in the particular alignment procedure being performed.

c. TEST SET-UP.—Figure 6-1 shows the test set-up for aligning all stages except the r-f section of the receiver. Figures 6-2 through 6-4 show receiver alignment controls and alignment points. Test set-ups for particular alignment procedures are not provided since there is no one test set-up for a particular alignment procedure.

d. CONNECTIONS.—Connections are to be made as directed throughout each alignment procedure, and are given in the particular alignment procedure being performed.

e. FIRST AND SECOND I-F ALIGNMENT.—Perform the i-f alignment as follows:

(1) Place RECEPTION switch in A2 position.

(2) Connect electronic voltmeter between terminal E of Z1012 and ground. (See figure 6-3.)

(3) Use a 1.0-microfarad capacitor connected in series with the ungrounded lead of the signal generator and connect output of signal generator between terminal A of Z1008 and ground.

(4) Set the generator to 200 kc and adjust generator signal level to obtain a reading of not less than 1-volt on voltmeter 10-volt range.

NOTE

Signal generator level must be checked and adjusted as the alignment progresses for a meter indication within the 10-volt range. As each adjustment is made, the output of the detector will increase, and the generator output must be reduced accordingly.

(5) Connect a 680-micromicrofarad shunting capacitor between terminal F of Z1012 and ground.

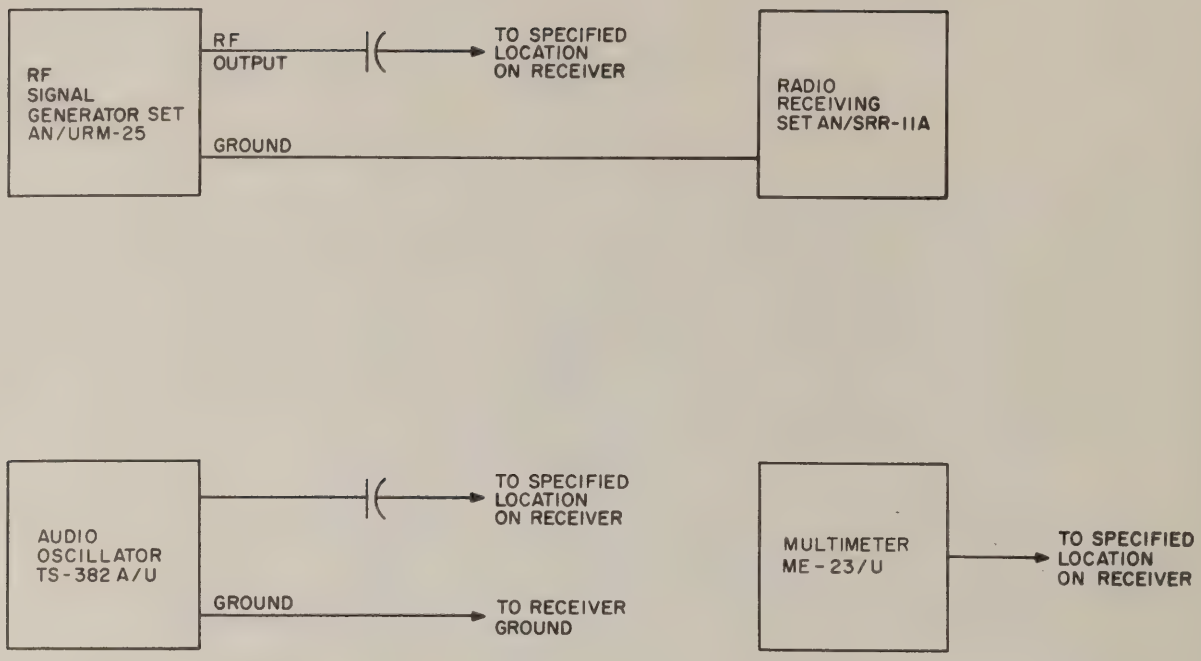


Figure 6–1. Test Set-up for Checking Receiver Sensitivity and Selectivity

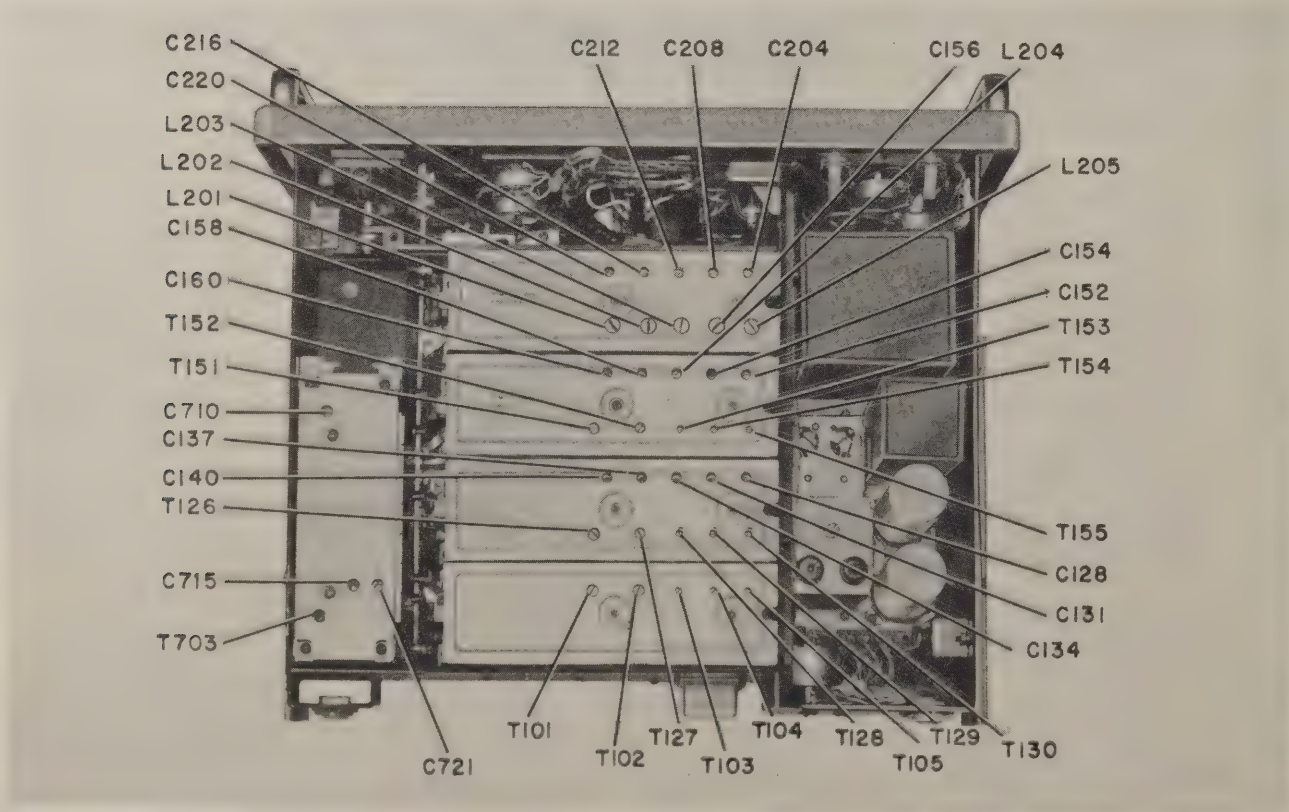


Figure 6–2. Receiver Alignment Controls, Top View

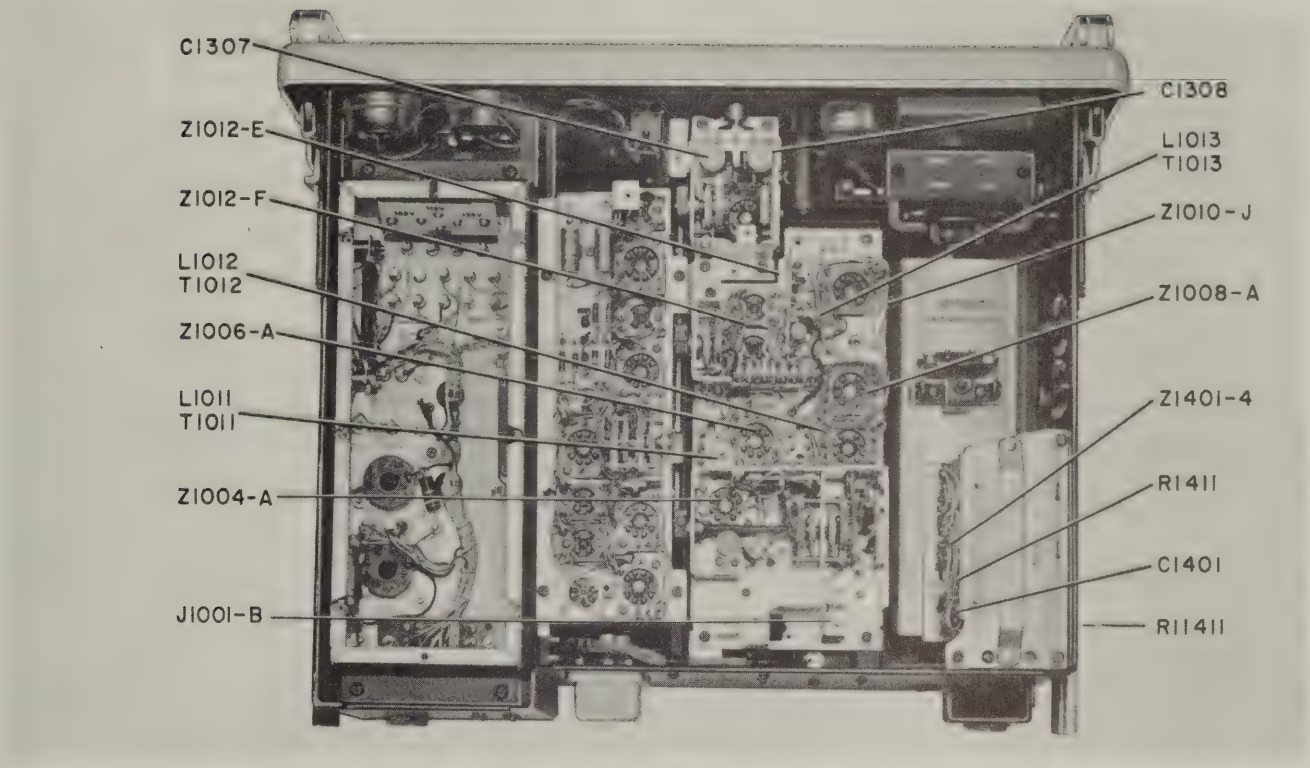


Figure 6–3. Receiver Alignment Points, Top View

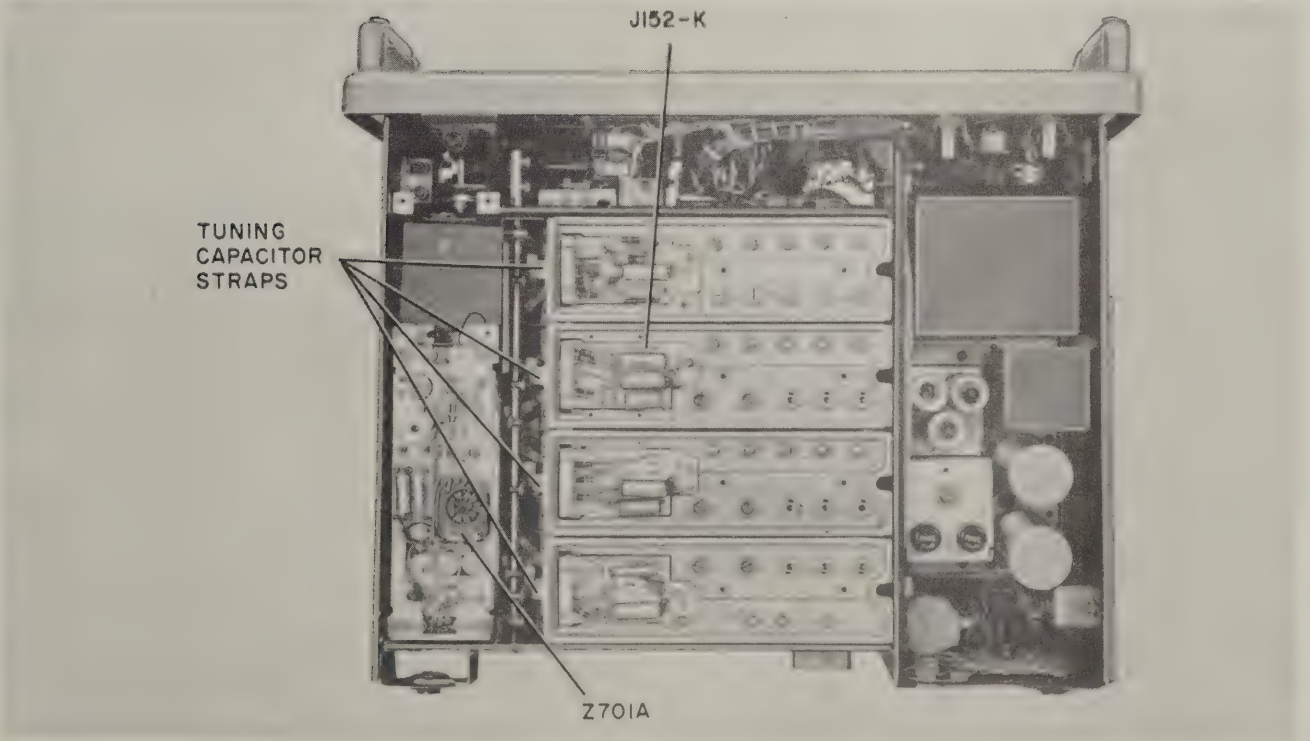


Figure 6–4. Receiver Alignment Points, Bottom View

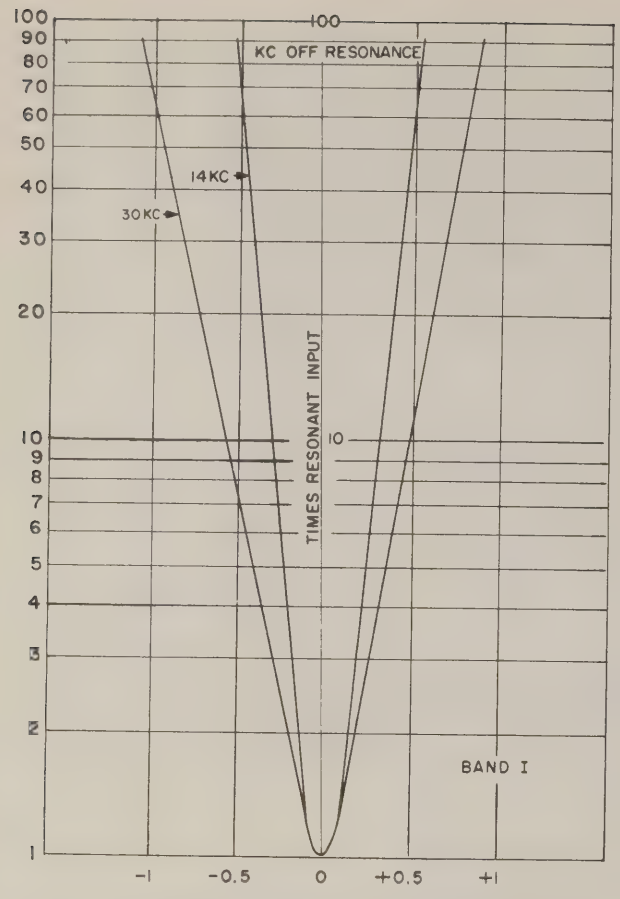


Figure 6–5. Selectivity Curves (Sheet 1 of 5)

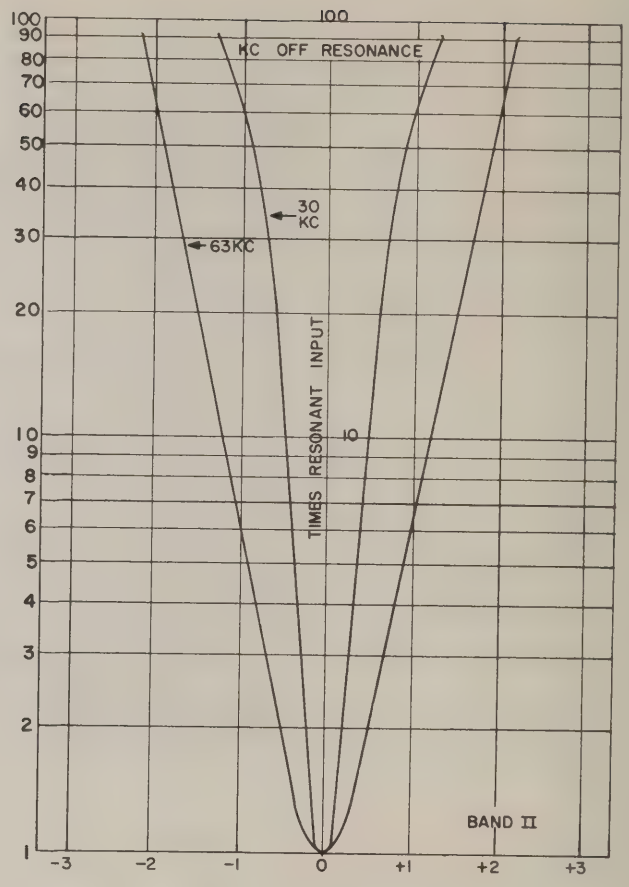


Figure 6–5. Selectivity Curves (Sheet 2 of 5)

(6) Adjust L1013 for maximum output as indicated on voltmeter.

(7) Remove the 680-micromicrofarad capacitor from terminal F of Z1012 and adjust T1013 for maximum output.

(8) Connect output of signal generator to terminal A of Z1006 and connect a 680-micromicrofarad capacitor between terminal A of Z1008 and ground.

(9) Adjust L1012 for maximum output.

(10) Remove the 680-micromicrofarad capacitor from terminal A of Z1008 and tune T1016 for maximum output.

(11) Connect output of signal generator to terminal A of Z1004 and connect a 680-micromicrofarad capacitor between terminal A of Z1006 and ground.

(12) Adjust L1016 for maximum output.

(13) Remove the 680-micromicrofarad capacitor from terminal A of Z1006 and adjust T1015 for maximum output.

(14) Connect a jumper wire between input terminal B of J1001 and terminal A of Z1004.

(15) Connect output of signal generator to pin K of J152 (figure 6–4) and tune first i-f output transformer, T703 (figure 6–2), for maximum output.

(16) Set band switch in 133–283 kc position.

(17) Connect output of signal generator to terminal A of Z701 and tune C721 for maximum output.

(18) Remove jumper wire from terminal B of J1001 and terminal A of Z1004.

f. I-F FILTER ALIGNMENT.

(1) SHARP FILTER Z1015A. Sharp filter Z1015A, part of filter Z1015, is a mechanical filter that is factory set. If the sharp filter is not aligned properly, replace Z1015 with a new filter and return the faulty filter for salvage. To determine if the filter is properly aligned, proceed as follows:

(*a*) Place RECEPTION control in A2 position.

(*b*) Place POWER ON-OFF switch in ON position.

(*c*) Connect signal generator to terminal A of Z701 through a 1.0 microfarad capacitor. (See figure 6–16.)

(*d*) Connect vtvm to terminal E of Z1012. (See figure 6–32.)

(*e*) Set signal generator to 200.0 kc and adjust output level for mid-scale reading on vtvm. Note vtvm reading.

(*f*) Set signal generator first to 199.5 kc and then to 200.5 kc. Note vtvm reading for each frequency. If both readings are not within 70.7 percent

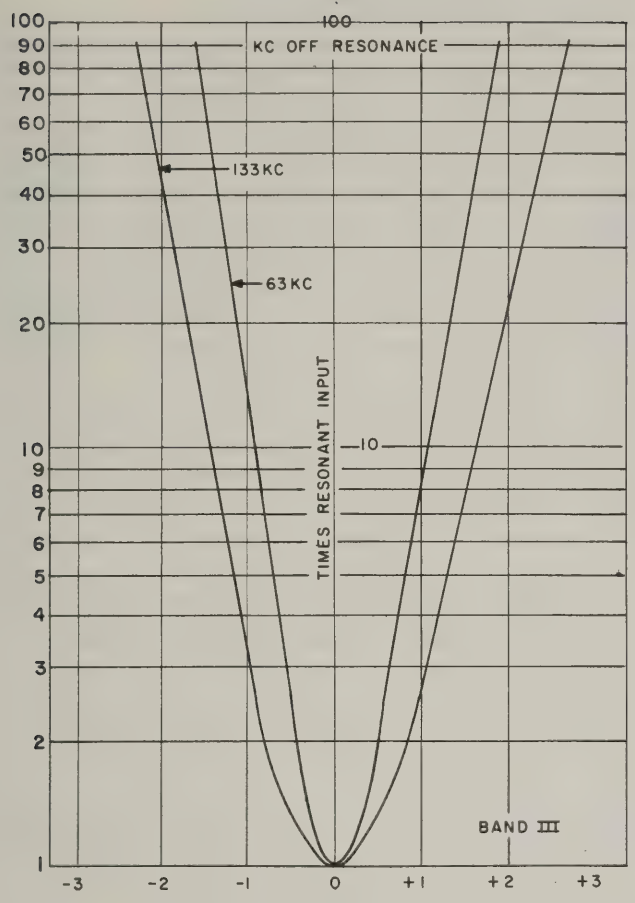


Figure 6–5. Selectivity Curves
(Sheet 3 of 5)

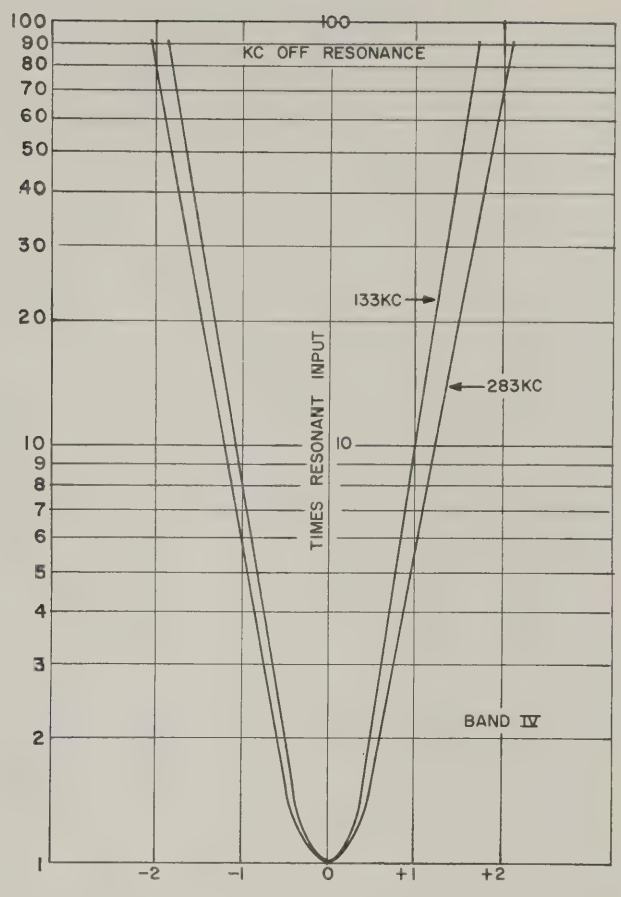


Figure 6–5. Selectivity Curves
(Sheet 4 of 5)

of reading noted in step (*e*), above, replace filter Z1015.

(2) MEDIUM FILTER Z1015B. Medium filter Z1015B, part of filter Z1015, is a mechanical filter that is factory set. If the medium filter is not aligned properly, replace Z1015 with a new filter and return the faulty filter for salvage. To determine if the filter is properly aligned, proceed as follows:

(*a*) Place RECEPTION control in A1 SHARP position.

(*b*) Perform steps (*b*) through (*e*) of paragraph 6–2*f* (1), above.

(*c*) Set signal generator first to 198.5 kc and then to 201.5 kc. Note vtvm reading for each frequency. If both readings are not within 70.7 percent of the reading noted at the center frequency (step (*e*) of paragraph 6–2*f* (1), above), replace filter Z1015.

(3) FIRST I-F BAND-PASS FILTER.—To align the first i-f band-pass filter, proceed as follows:

(*a*) Connect electronic voltmeter between terminal E of Z1012 and ground. (See figure 6–3.)

(*b*) Place band switch in 63–133 kc position.

(*c*) Connect signal generator to mixer input connector, terminal K of J152. (See figure 6–4.)

(*d*) Set signal generator to 60 kc and adjust C710 and C715 (figure 6–2) for maximum on volt-

g. BFO ALIGNMENT.—To align the BFO, proceed as follows:

(1) Set RECEPTION SWITCH in A1 BROAD position, and rotate FREQ VERNIER to zero position.

(2) Connect the output terminals of an audio oscillator (paragraph 6–2*a.*) to the horizontal input terminals of an oscilloscope. Set the audio oscillator frequency to 2550 cps, and set oscilloscope synchronization off.

(3) Connect vertical input of oscilloscope to terminal J of Z1010 and apply 200 kc-signal to terminal A of Z1004 from signal generator. Use a 1.0-microfarad capacitor in series with signal generator connection. (See figure 6–3.)

(4) Adjust C1307 (figure 6–3) for a circular pattern on the oscilloscope.

h. CRYSTAL CALIBRATOR ALIGNMENT.—The following procedures are used to align crystal calibrator oscillator Z1404 and multivibrator Z1402.

(1) CRYSTAL CALIBRATOR OSCILLATOR.—To align crystal calibrator oscillator, proceed as follows:

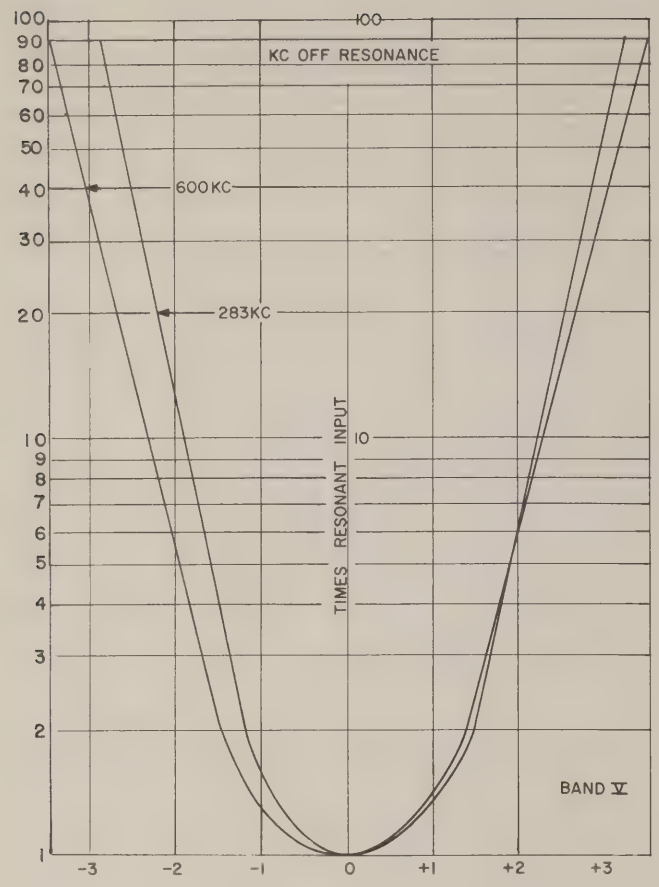


Figure 6–5. Selectivity Curves (Sheet 5 of 5)

(*a*) Place RECEPTION switch in A2 position.

(*b*) Tune frequency meter to 50 kc and connect to Z1401–H. (See figure 6–3.)

(*c*) Adjust C1401 (figure 6–2) for maximum indication on frequency meter.

NOTE

The frequency of the crystal calibrator crystal is approximately 0.01-percent high at room temperature so that it may maintain their frequency within tolerance over a wide range of ambient temperatures. A slight variation in frequency may be achieved by adjusting C1401. However, this capacitor is factory set and normally will not need readjustment.

(*d*) Disconnect frequency meter.

(2) MULTIVIBRATOR.—To align the multivibrator in the crystal calibrator, proceed as follows:

(*a*) Place band selector switch in 63–133 kc position.

(*b*) Adjust R1411 (figure 6–3) for eight beat notes across band.

(*c*) Mark position of R1411.

(*d*) Readjust R1411 for six beat notes across band.

(*e*) Mark position of R1411.

(*f*) Set R1411 halfway between the two marked positions.

(*g*) Check tuning dial for beat notes at 10-kc separations.

i. R-F SECTION ALIGNMENT.—To completely align the r-f section, the antenna preamplifier, first r-f amplifier, mixer, and oscillator must be aligned individually on each band. In addition, each band should be aligned at the upper and lower ends of the band. Thus, 10 adjustments are required to completely align each stage and 40 adjustments must be made to align the entire r-f section.

Table 6–1 lists the steps necessary to align the r-f section, the control or reference symbol of the part to be adjusted, the signal generator and receiver frequency, and the position of the band selector switch.

NOTE

The adjustments listed in table 6–1 should be made in groups as determined by the particular band being aligned. For example, the oscillator adjustments for band 1 are made and checked before aligning the oscillator on band 2; or before aligning the antenna preamplifier, r-f amplifier, or mixer on band 1.

In each of these procedures a headset and/or the OUTPUT meter is used to provide the required indication. The following steps should be performed before the actual alignment procedures:

(1) Plug a headset in PHONES jack and set RECEPTION switch to A1 BROAD position.

(2) Place CAL. ON-OFF switch in ON position.

(3) Tune receiver away from calibration frequency.

(4) Connect modulated output of signal generator to ANT receptacle at rear of cabinet.

NOTE

Use impedance adapter (Type MX–1074/URM–25) and antenna simulator (Type SM–35/URM–25) to make this connection.

(5) Increase signal generator level to obtain beat note.

(6) Adjust signal generator for zero beat.

(7) Place CAL. ON-OFF switch in OFF position.

(8) Adjust FREQ VERNIER control for zero beat.

(9) Set links O101 and O102 so that no connections are made.

(10) Connect a 39 micromicrofarad capacitor between terminal 10 on plug-in board Z101 and ground.

(11) Connect signal generator between terminal 10 on plug-in board Z101 and ground.

(12) Tune receiver and signal generator to frequency specified in table 6–1.

(13) Check frequency of signal generator, using frequency meter.

(14) Place ADD DECIBELS switch in —10 position.

TABLE 6–1. R-F SECTION ALIGNMENT PROCEDURE

STEP	SIGNAL GENERATOR AND RECEIVER FREQUENCY (KC)	ADJUST		STAGE	BAND
		TRIMMER CAPACITOR	INDUCTOR		
1	30	C220*		Oscillator	14–30
2	14		L201*	Oscillator	14–30
3	63	C216*		Oscillator	30–63
4	30		L202*	Oscillator	30–63
5	133	C212*		Oscillator	63–133
6	63		L203*	Oscillator	63–133
7	283	C208*		Oscillator	133–283
8	133		L204*	Oscillator	133–283
9	600	C204*		Oscillator	283–600
10	283		L205*	Oscillator	283–600
11	28.65	ANT. COMP.**		Antenna preamplifier	14–30
12	28.65	C140**		R-f amplifier	14–30
13	28.65	C160**		Mixer	14–30
14	14.82		T101**	Antenna preamplifier	14–30
15	14.82		T126**	R-f amplifier	14–30
16	14.82		T151**	Mixer	14–30
17	60.1	ANT. COMP.**		Antenna preamplifier	30–63
18	60.1	C137**		R-f amplifier	30–63
19	60.1	C158**		Mixer	30–63
20	31.78		T102**	Antenna preamplifier	30–63
21	31.78		T127**	R-f amplifier	30–63
22	31.78		T152**	Mixer	30–63
23	128	ANT. COMP.**		Antenna preamplifier	63–133
24	128	C134**		R-f amplifier	63–133
25	128	C156**		Mixer	63–133
26	66.6		T103**	Antenna preamplifier	63–133
27	66.6		T128**	R-f amplifier	63–133
28	66.6		T153**	Mixer	63–133
29	269.4	ANT. COMP.**		Antenna preamplifier	133–283
30	269.4	C131**		R-f amplifier	133–283
31	269.4	C154**		Mixer	133–283
32	140		T104**	Antenna preamplifier	133–283
33	140		T129**	R-f amplifier	133–283
34	140		T154**	Mixer	133–283
35	570.8	ANT. COMP.**		Antenna preamplifier	283–600
36	570.8	C128**		R-f amplifier	283–600
37	570.8	C152**		Mixer	283–600
38	298.8		T105**	Antenna preamplifier	283–600

*Adjust for zero beat.
**Adjust for maximum output.

TABLE 6–1. R-F SECTION ALIGNMENT PROCEDURE (Cont.)

STEP	SIGNAL GENERATOR AND RECEIVER FREQUENCY (KC)	ADJUST		STAGE	BAND
		TRIMMER CAPACITOR	INDUCTOR		
39	298.8		T130**	R-f amplifier	283–600
40	298.8		T155**	Mixer	283–600

**Adjust for maximum output.

(15) Adjust receiver GAIN control and signal generator output control for —10 db on OUTPUT meter.

(16) Place ADD DECIBELS switch in 0 position.

(17) Adjust trimmer capacitors and inductors associated with frequency used for either zero beat or maximum indication. (See table 6–1.)

(18) Reconnect links O101 and O102.

(19) Disconnect all test equipment.

CAUTION

When aligning the inductors of the oscillator stage remove oscillator caps and adjust oscillator slug using special screwdriver clipped to the rear of the receiver front panel. Use the outer blade of the screwdriver to hold plastic slug support while adjusting slug with inner blade. Do not adjust plastic support.

NOTE

Steps (13) through (19) are repeated for each frequency.

(*a*) EXAMPLE OF OSCILLATOR ALIGNMENT.—The following steps should be performed to align one band of the oscillator:

Step 1. Perform steps (1) through (8) of paragraph 6–2*i*.

Step 2. Place band selector switch in 14–30 kc position.

Step 3. Lock CAL. ADJUST control in center position.

Step 4. Tune receiver and signal generator to 30 kc. (See step 1, table 6–1.)

Step 5. Check frequency of signal generator with frequency meter.

Step 6. Place ADD DECIBELS switch in —10 db position.

Step 7. Adjust GAIN control for —10 db reading on OUTPUT meter.

Step 8. Place ADD DECIBELS switch in 0 position.

Step 9. Adjust C220 (figure 6–2) for zero beat on headset.

Step 10. Tune receiver and signal generator to 14 kc.

Step 11. Check output of signal generator with frequency meter.

Step 12. Repeat steps (6) through (8).

Step 13. Adjust L201 for zero beat on headset.

Step 14. Repeat steps (4) through (13).

Step 15. Perform calibration checks in accordance with paragraph 6–2*j*.

(*b*) EXAMPLE OF ANTENNA PREAMPLIFIER, R-F AMPLIFIER, AND MIXER ALIGNMENT.—The following steps should be performed to align one band of the antenna preamplifier, r-f amplifier, and mixer:

Step 1. Perform steps (1) through (8) of paragraph 6–2*i*.

Step 2. Place band selector switch in 14–30 kc position.

Step 3. Lock CAL ADJUST control in center position.

Step 4. Tune receiver and signal generator to 28.65 kc.

Step 5. Check output of signal generator with frequency meter.

Step 6. Place ADD DECIBELS switch in —10 position.

Step 7. Adjust GAIN control for —10 db on OUTPUT meter.

Step 8. Place ADD DECIBELS switch in 0 position.

Step 9. Adjust ANT. COMP., C140, and C160 for maximum on headset and/or OUTPUT meter. (See steps 11, 12, and 13, table 6–1.)

Step 10. Return receiver and signal generator to 14.82 kc.

Step 11. Check output of signal generator with frequency meter.

Step 12. Repeat steps (6) through (8).

Step 13. Adjust T101, T126, and T151 for maximum on headset and/or OUTPUT meter.

Step 14. Repeat steps (4) through (13) as required to reduce interaction.

j. CALIBRATION CHECK.—When each band of the oscillator is aligned, the range of the CAL. ADJUST control is checked for each calibration point in the band. To perform this check, proceed as follows:

(1) Set CAL. ADJUST control to center position.

(2) Check all calibration points on band.

(3) Note linear divisions on linear scale by which zero beat is displaced from calibration points.

NOTE

Use negative numbers when zero beat is located below the calibration point.

(4) Sum up positive and negative numbers from step (3).

(5) Set tuning dial to a calibration marker at the low end of the band and note reading on linear scale.

(6) Turn tuning dial until linear scale is displaced by number of divisions computed in step (4).

(7) Lock CAL. ADJUST control so that calibration marker at low end of scale coincides with linear scale reading obtained in step (6).

(8) Realign oscillator with CAL. ADJUST control locked in position determined in step (7).

(9) Recheck calibration points.

NOTE

If the calibration check points still cannot be brought into coincidence with the CAL. ADJUST control, realign tuning dial in accordance with paragraph 6-3*b*(1).

(*a*) EXAMPLE OF CALIBRATION CHECK. Assume that calibration beat notes are hard at the following frequencies: 68 kc, 81 kc, 91 kc, 100 kc, 108 kc, 119 kc and 130 kc. The net total of linear scale divisions that the beat note is displaced is −3 (−2+1+1−2−1= −3). The tuning dial is then rotated to a beat note at the end of the scale (about 20 kc). If this beat note is actually heard at 22 kc, the tuning dial is set to 19 kc (22 kc −3 kc). The CAL. ADJUST. control is then adjusted and locked at a point which provides a beat note at 19 kc.

6-3. REMOVAL, ADJUSTMENT, REPAIR, AND REASSEMBLY OF PARTS AND SUBASSEMBLIES.

a. REMOVAL AND REASSEMBLY.—The following paragraphs describe the procedure used to remove, replace, and disassemble (where necessary) parts of the receiver. Only those parts whose removal and replacement is not obvious are covered. Parts such as resistors, capacitors, and transformers, are not covered. Figures 6-6 through 6-11 illustrate some of the removal procedures covered in the following paragraphs. Figures 6-12 through 6-29 show the location of plug-in units and parts on the subassemblies and the chassis. Connection and wiring diagrams for the plug-in units, plug-in boards, and the chassis are shown in figures 6-31 through 6-67.

(1) REMOVING AND REPLACING POWER SUPPLY OR CRYSTAL CALIBRATOR SUBASSEMBLY. (*See figure 6-6.*)—The power supply or crystal calibrator subassembly is removed by releasing captive screws and lifting the subassembly from chassis. The subassembly is replaced by orienting the subassembly connector and chassis socket and tightening the captive screws.

(2) REMOVING AUDIO, SECOND I-F, OR BFO SUBASSEMBLY. (*See figure 6-6.*)—To remove the audio, second i-f, or BFO subassembly, proceed as follows:

(*a*) Set RECEPTION switch to A2 position.

(*b*) On BFO only, loosen set screw in collar of frequency vernier shaft and separate shaft assembly from subassembly. (See figure 6-21.)

(*c*) Release captive screws.

(*d*) Carefully lift subassembly from chassis.

(3) REPLACING AUDIO, SECOND I-F, OR BFO SUBASSEMBLY. (*See figure 6-6.*)—To replace the audio, second i-f, or BFO subassembly, proceed as follows:

(*a*) Set RECEPTION switch to A2 position.

(*b*) Orient connector on subassembly with socket on chassis, and set subassembly in place.

NOTE

Make certain crank arm on subassembly is set properly to engage RECEPTION control bar.

(*c*) Tighten captive screws.

(4) REMOVING ANTENNA, R-F, MIXER, OSCILLATOR, OR FIRST I-F SUBASSEMBLY. (*See figure 6-7.*)—To remove the antenna, r-f, mixer, oscillator, or first i-f subassembly, proceed as follows:

(*a*) Set band selector switch to 283-600 kc position.

(*b*) Place chassis in servicing position for access to bottom of receiver.

(*c*) Disconnect tuning capacitor strap leads (figure 6-4) of subassembly to be removed (does not apply to first i-f subassembly).

(*d*) Release three captive screws and carefully remove subassembly.

(5) REPLACING ANTENNA, R-F, MIXER, OSCILLATOR, OR FIRST I-F SUBASSEMBLY. (*See figure 6-7.*)—To replace the antenna, r-f, mixer, oscillator, or first i-f subassembly, proceed as follows:

(*a*) Set band selector switch to 283-600 kc position.

(*b*) Orient subassembly connector with chassis socket and set subassembly in place.

NOTE

Make certain switch crank arms properly engage slot in operating bar.

(*c*) Tighten three captive screws.

(*d*) Connect tuning capacitor strap leads.

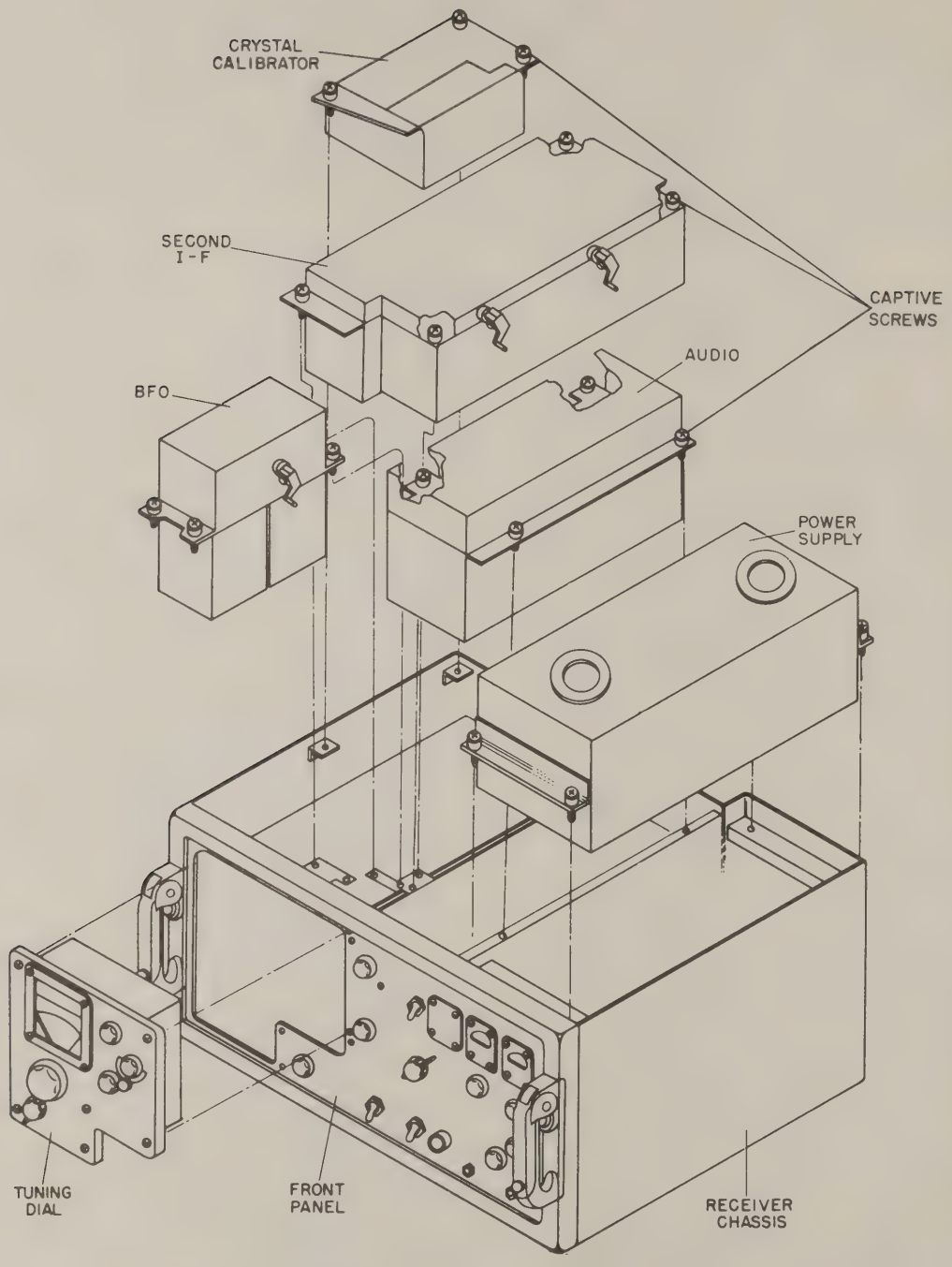


Figure 6–6. Removal of Subassemblies from Top of Chassis

(6) REMOVING AND REPLACING PLUG-IN UNITS AND PLUG-IN BOARDS.—Two types of plug-in assemblies are used in the receiver. The plug-in unit as found in the BFO, crystal calibrator, first i-f, second i-f, and audio subassemblies; and the plug-in boards as found in the antenna, r-f, mixer, and oscillator subassemblies. The following paragraphs contain the procedures used for removing and replacing these plug-in assemblies.

(*a*) REMOVING PLUG-IN UNITS. (*See A, figure 6–8.*)—To remove a plug-in unit, proceed as follows:

1. Remove subassembly from receiver.

2. Depress center of release bar at top of unit and twist bar one quarter turn.

3. Grip center of release bar with thumb and index finger and pull unit out of subassembly.

NOTE

If it is difficult to remove the plug-in unit, push gently on the socketed end while removing the unit.

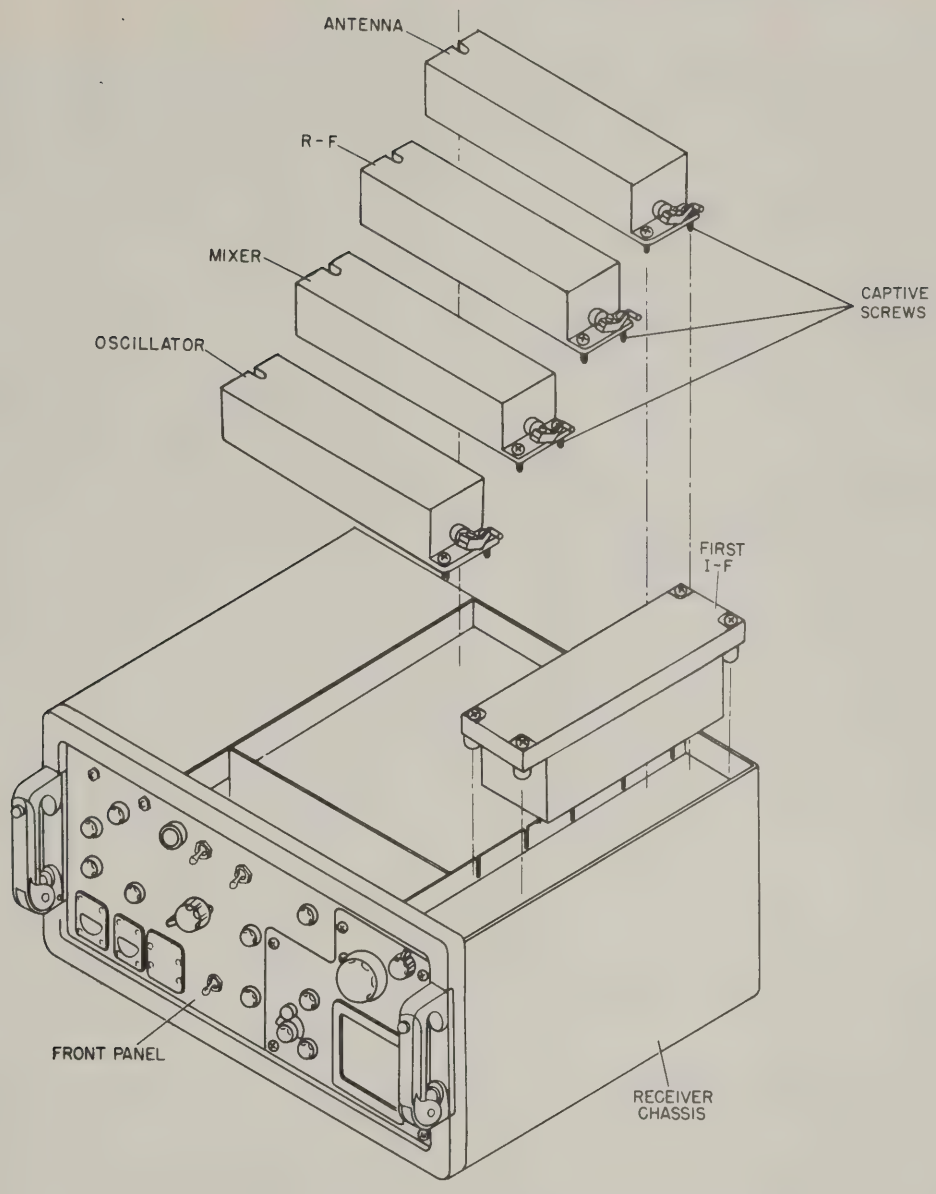


Figure 6–7. Removal of Subassemblies from Bottom of Chassis

(*b*) REPLACING PLUG-IN UNITS. (*See A, figure 6–8.*)—To replace a plug-in unit, proceed as follows:

1. Place unit so that arrow on top cover of unit points to white dot on side wall of the corresponding compartment in chassis. This lines up connecting pins on the unit with corresponding socket terminals on the chassis.

2. Push unit in place.

3. Depress release bar, and twist bar until the ends fit into slotted holes in metal compartment.

(*c*) REMOVING PLUG-IN BOARDS. (*See B, figure 6–8.*)—To remove a plug-in board, proceed as follows:

1. Remove cover of subassembly.

2. Pull board from its position by gripping metal bar and post at ends of board.

(*d*) REPLACING PLUG-IN BOARDS. (*See B, figure 6–8.*)—To replace a plug-in board, proceed as follows:

1. Turn board so pins fit over holes in subassembly.

2. Carefully insert board in place.

3. Replace subassembly cover.

(7) REPLACING ELECTRON TUBES.—All electron tubes used in the receiver are of the subminiature type. The subminiature tubes are soldered into the plug-in units and cannot be tested in the conventional manner. It is recommended that a faulty stage be replaced with a spare plug-in unit or plug-in board after the trouble has been isolated. However, if it is necessary to replace a subminiature tube, the procedure is given below. Two types of subminiature tubes are

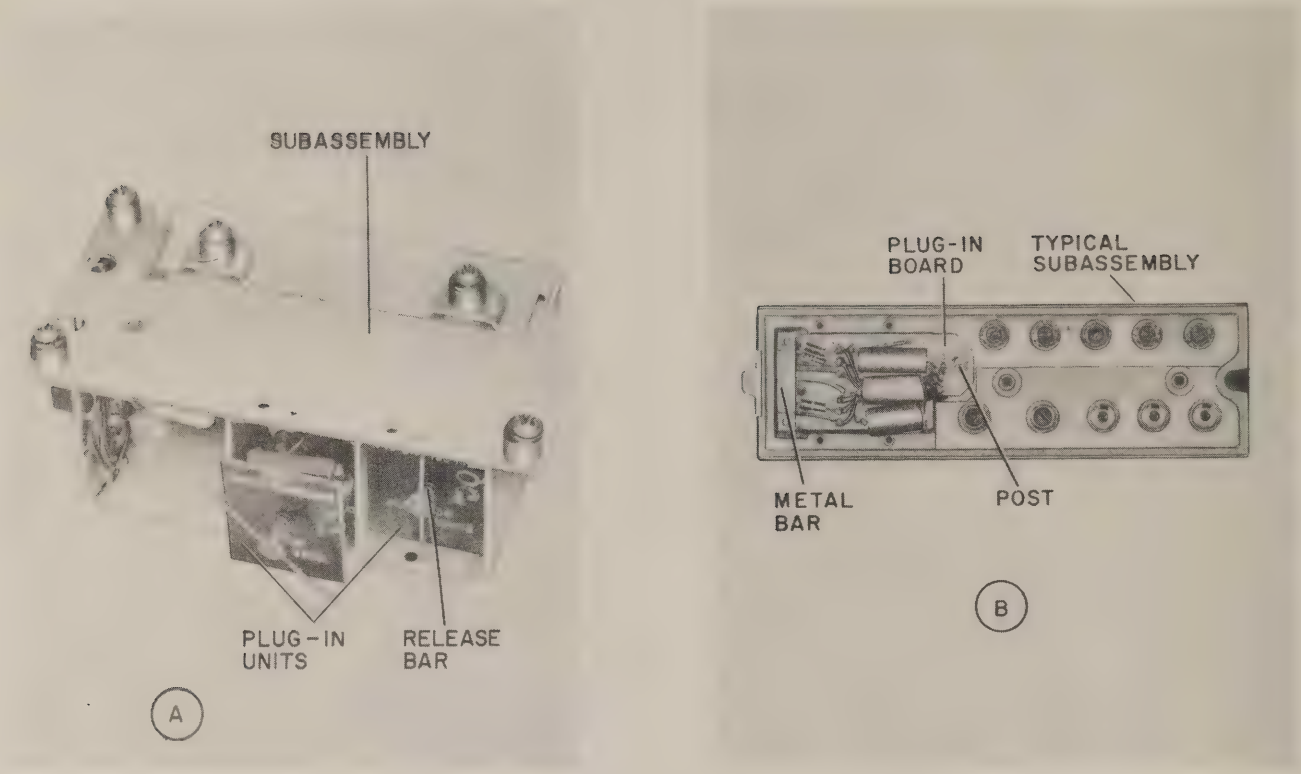


Figure 6–8. Removal of Plug-in Units and Plug-in Boards

used in the receiver: an eight pin tube and a four pin tube.

NOTE

All tubes of a given type supplied with the equipment should be used before using tubes from general stock.

(*a*) REPLACING EIGHT-PIN TUBES FROM PLUG-IN BOARDS. (*See A, figure 6–9* and appropriate connection diagram.)—To remove an 8-pin tube from a plug-in board, proceed as follows:

1. Remove cover from subassembly.
2. Remove plug-in board from subassembly.
3. Unsolder tube leads at terminals.
4. Remove tube from metal shield.
5. Replace defective tube with spare of same type.
6. Solder lead 1 to terminal 1, lead 2 to terminal 2, etc. Leads are numbered clockwise from wide separation.
7. Cut leads close to terminals.

(*b*) REPLACING EIGHT-PIN TUBES FROM PLUG-IN UNITS. (*See B, figure 6–9* and appropriate connection diagram.)—To remove an 8-pin tube from a plug-in unit, proceed as follows:

1. Remove subassembly from chassis.
2. Remove plug-in unit from subassembly.
3. Unsolder leads at terminal of tube base.
4. Pull tube through hole in base of plug-in unit.
5. Insert replacement tube so that widest space between leads is opposite the raised key on socket.
6. Solder lead 1 to terminal 1, lead 2 to terminal 2, etc. Leads are numbered clockwise starting from left of key.

NOTE

For plug-in unit Z1109, depress the locking pin at the top of the unit and insert tube until the tip just clears the end of the pin. All other tubes are inserted so that base is approximately flush with the shield.

(*c*) REPLACING FOUR-PIN TUBES. (*See C, figure 6–9* and appropriate connection diagram.)—To replace a 4-pin tube from a plug-in unit, proceed as follows:

1. Remove subassembly from chassis.
2. Remove plug-in unit from subassembly.
3. Unsolder four leads at terminals of tube base.
4. Pull tube through hole in base of plug-in unit.
5. Orient replacement tube so that blue lead is nearest blue dot on socket and yellow lead is nearest yellow dot on socket.

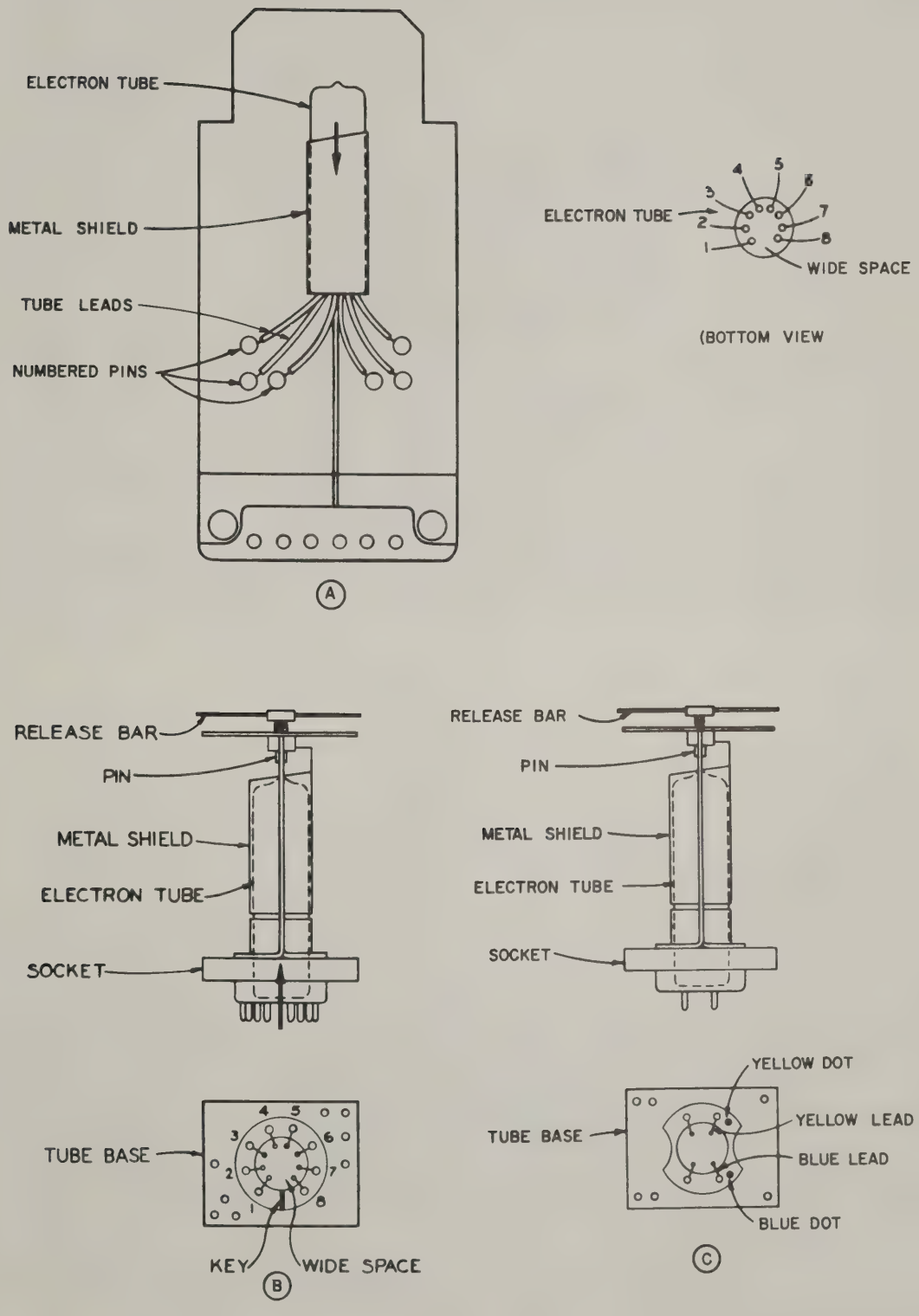


Figure 6-9. Removal of Tubes from Plug-in Units and Plug-in Boards

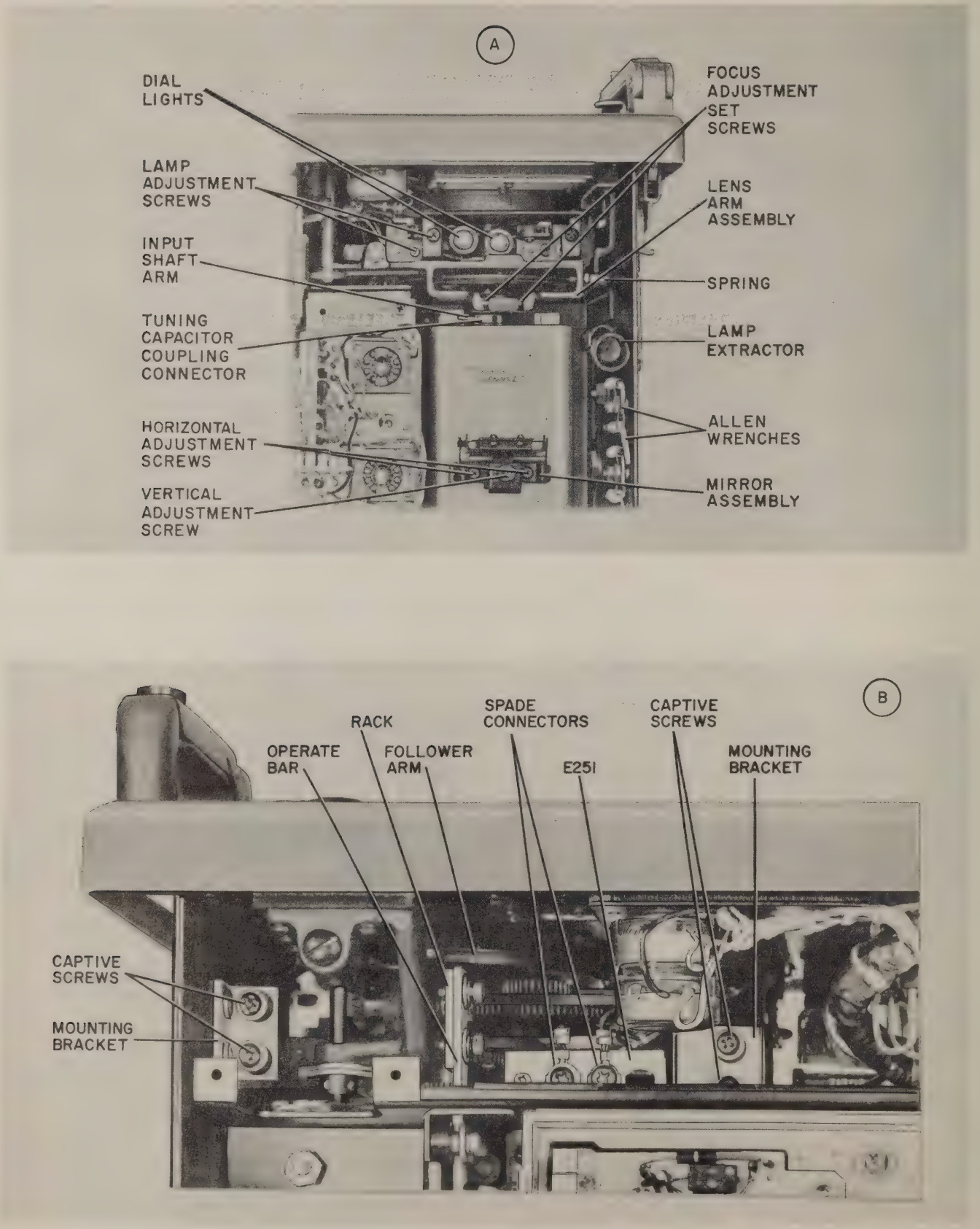


Figure 6–10. Removal of Tuning Dial

6. Solder four leads to nearest terminals.

NOTE

The leads of the four-pin subminiature tube are numbered consecutively, beginning from the blue lead (terminal 1) and proceeding clockwise to the yellow lead (terminal 4).

(8) REPLACING POWER LIGHT, DIAL LIGHTS, AND CRYSTALS.

(*a*) POWER LIGHT.—To remove the power light, proceed as follows:

1. Remove pilot light cover.
2. Place end of lamp extractor H260 (A, figure 6–10) over bulb and press on plunger until it grips bulb.

NOTE

Lamp extractor H260 is located in a clip on the left inner wall of the chassis.

3. Remove bulb by twisting extractor and pulling outward.

(*b*) DIAL LIGHTS. (*See A, figure 6–10.*)

1. Pull chassis partly out of cabinet.
2. Loosen two captive screws that retain dial light cover.
3. Slide cover forward so that keyhole-shaped openings clear captive screws.
4. Lift off cover.
5. Replace faulty bulb or bulbs, using lamp extractor.
6. Turn LAMPS switch to NORM position.
7. Center lamp by using lamp adjustment screws.

NOTE

Larger screw moves lamp from side to side; smaller screw moves lamp up or down. Lamp is properly centered when a paper held between the focusing lens and mirror, perpendicular to the light beam, shows a well-defined circular illuminated area.

(*c*) CRYSTALS.—To remove the crystal in the calibrator or first i-f subassembly, proceed as follows:

1. Remove subassembly.
2. Remove crystal by gently rocking back and forth while pulling.
3. Firmly press new crystal into holder.

(9) REMOVING TUNING DIAL. (*See figure 6-10.*)—To remove the tuning dial, proceed as follows:

(*a*) Set band switch to 63-133 kc position.

(*b*) Slide chassis out of cabinet.

(*c*) Set LAMPS switch to SPARE position.

(*d*) Disconnect spring holding Lens Arm Assembly and swing Lens Arm Assembly clear. Loosen two set screws on coupling connector between tuning dial output shaft and tuning capacitor input shaft, using Allen wrench clipped to side of chassis.

(*e*) Disconnect two spade connectors on terminal board E251 on bottom of chassis. (See B, figure 6-10.)

(*f*) Loosen four captive screws on mounting brackets which hold tuning dial to chassis.

(*g*) Remove rack from operate bar by removing two knurled hexagonal socket screws.

(*h*) Remove six recessed head screws from front of dial assembly.

(*i*) Ease tuning dial assembly out of chassis.

CAUTION

Make certain not to catch any of the grounding springs, gears, or mechanism of the dial.

(10) DISASSEMBLY OF TUNING DIAL See figure 6–11).—Disassemble the tuning dial as follows:

(*a*) Remove C-washer (2), washer (3), spring washer (4), and spacer (6) and remove knob (1) and shaft assembly (5).

(*b*) Remove hex nut (8) and lockwasher (9) and remove knob (7) and variable resistor (10). Unsolder and remove resistor (11).

(*c*) Remove thumbscrew (12), lockwasher (13), and lock (14).

(*d*) Remove retaining ring (16) and remove knob (15), and arm assembly (17).

(*e*) Remove knob (23), set screw (24), collar (25), and spring washer (26).

(*f*) Remove screw (27) and lockwasher (28) and remove drive assembly (29). Remove follower (30).

(*g*) Remove screw (31) and lockwasher (32) and remove window frame (33) and window (34).

(*h*) Remove screws (35 and 39), lockwashers (36 and 40), and washer (37) and remove screen (38) and reflector (41).

(*i*) Remove screw (42), lockwasher (43), and washer (44) and remove coupling assembly (45).

(*j*) Remove retaining ring (46) and washers (47, 48, and 49) and remove dial (50).

(*k*) Remove spring (51), screw (52), lockwasher (53), and bracket (54) and remove lens arm assembly (55).

NOTE

Hold lens arm assembly (55) while removing bracket (54), to prevent it from falling.

(*l*) Remove hex nut (56), lockwasher (57), and stud (58) and remove scissor gear (59).

(*m*) Remove set screw (60) and remove gear (61).

(*n*) Remove set screw (62) and gear (63) and remove gear (64).

(*o*) Remove set screw (65), screws (66 and 68), and lockwashers (67 and 69) and remove bracket casting (70).

(*p*) Remove screw (71) and lockwasher (72) and remove terminals (74) and cable clamp (73) from bracket casting (70).

(*q*) Remove retaining ring (75) and remove dial assembly (76).

(*r*) Remove screw (77), lockwasher (78), and washer (79) and remove vernier (80).

1. Knob
2. C-washer
3. Washer
4. Spring Washer
5. Shaft Assembly
6. Spacer
7. Knob
8. Hex Nut
9. Lockwasher
10. Variable Resistor
11. Resistor
12. Thumbscrew
13. Lockwasher
14. Lock
15. Knob
16. Retaining Ring
17. Arm Assembly
18. Knob
19. Set Screw
20. Collar
21. Spring Washer
22. Retaining Ring
23. Knob Assembly
24. Set Screw
25. Collar
26. Spring Washer
27. Screw
28. Lockwasher
29. Drive Assembly
30. Follower
31. Screw
32. Lockwasher
33. Window Frame
34. Window
35. Screw
36. Lockwasher
37. Washer
38. Screen
39. Screw
40. Lockwasher
41. Reflector
42. Screw
43. Lockwasher
44. Washer
45. Coupling Assembly
46. Retaining Ring
47. Washer
48. Washer
49. Washer
50. Dial
51. Spring
52. Screw
53. Lockwasher
54. Bracket
55. Lens Arm Assembly
56. Hex Nut
57. Lockwasher
58. Stud
59. Scissor Gear
60. Set Screw
61. Gear
62. Set Screw
63. Gear
64. Gear
65. Set Screw
66. Screw
67. Lockwasher
68. Screw
69. Lockwasher
70. Bracket Casting
71. Screw
72. Lockwasher
73. Cable Clamp
74. Terminal
75. Retaining Ring
76. Dial Assembly
77. Screw
78. Lockwasher
79. Washer
80. Vernier
81. Retaining Ring
82. Dial Assembly
83. Gear Stud
84. Spring
85. C-washer
86. Follower Assembly
87. Gear Assembly
88. Screw
89. Terminal
90. Actuator
91. Switch
92. Insulation
93. Panel Assembly

Legend for Figure 6–11

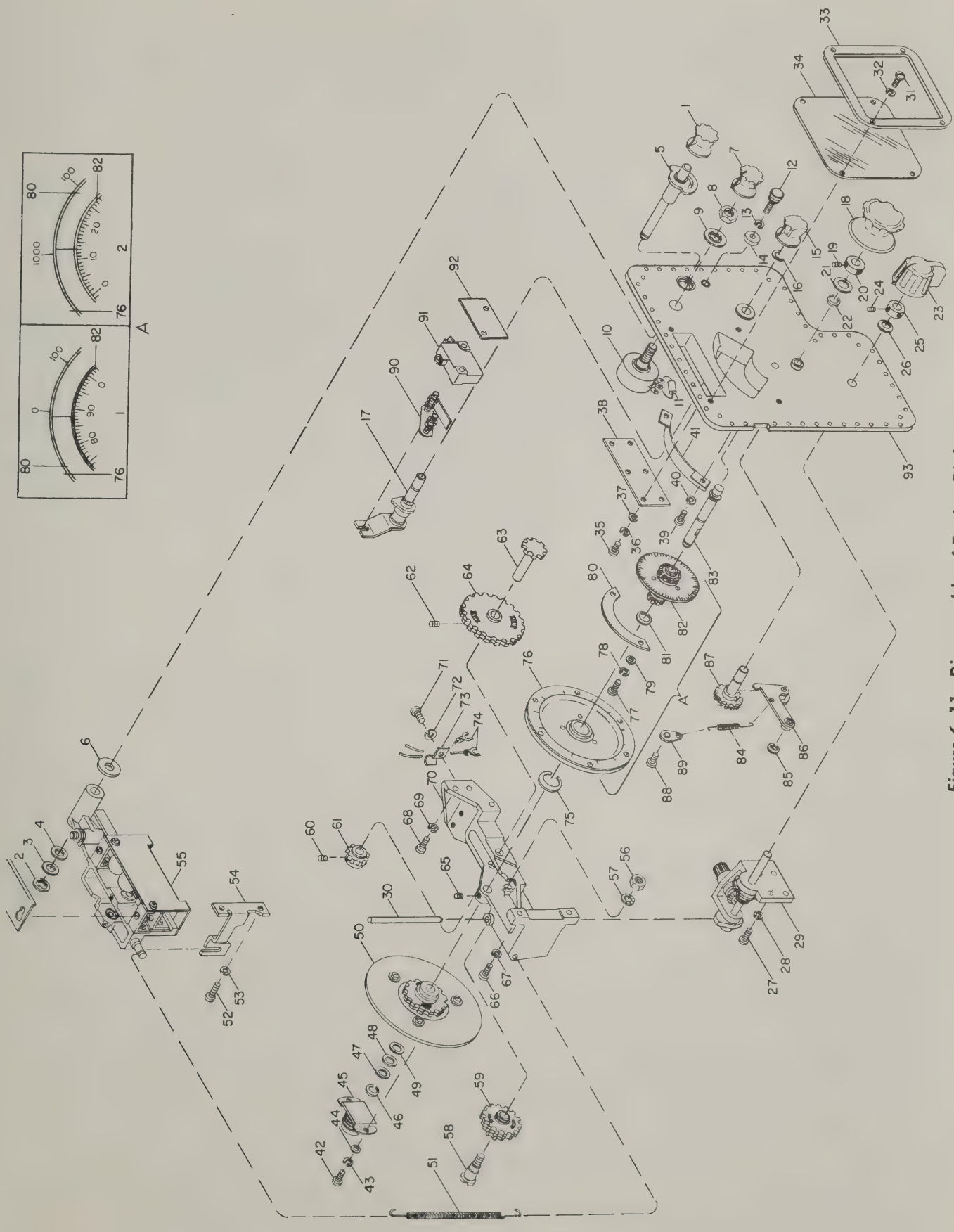


Figure 6–11. Disassembly of Tuning Dial

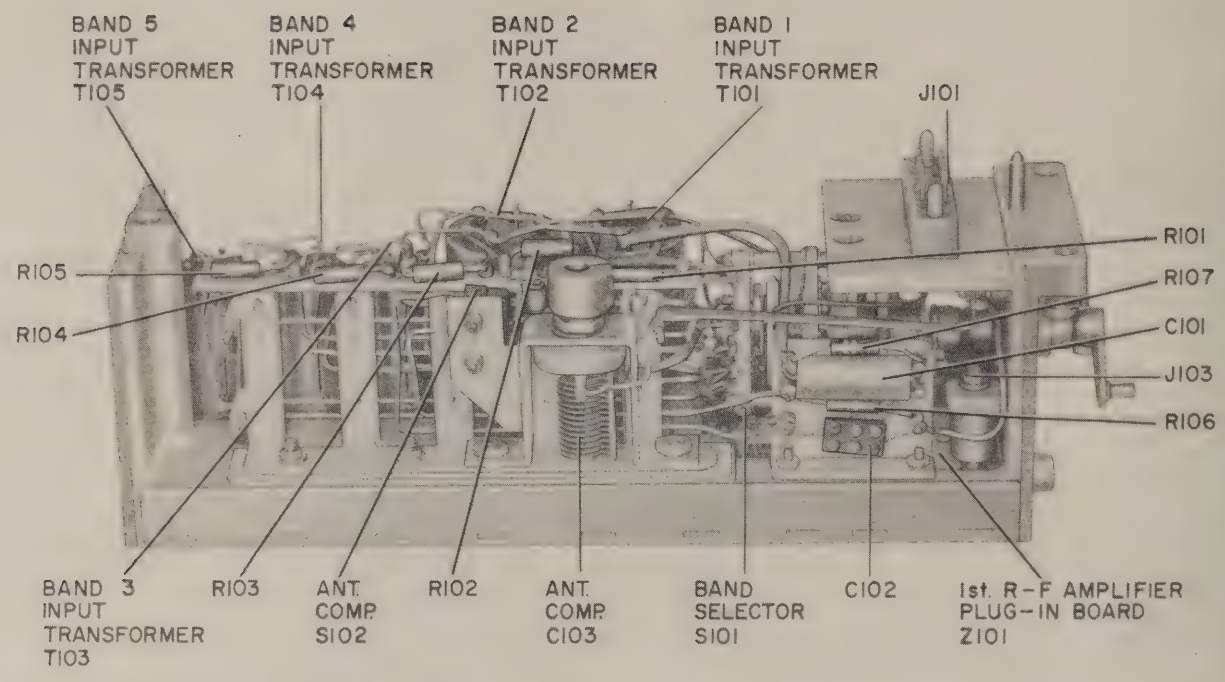


Figure 6–12. Antenna Preamplifier Subassembly, Left Side View, Part Location

(s) Remove retaining ring (81) and remove dial assembly (82) and gear stud (83).

(t) Remove spring (84) and C-washer (85) and remove gear assembly (87) and follower assembly (86).

(u) Remove screw (88) and remove terminal (89).

(v) Remove attaching hardware supplied with switch (91) and remove actuator (90), switch (91), and insulation (92).

(11) REASSEMBLY OF TUNING DIAL. (*See figure 6–11.*)—To reassemble the tuning dial, proceed as follows:

(a) Install insulation (92), switch (91) and actuator (90) on arm assembly (17) using attaching hardware supplied with switch.

(b) Install arm assembly (17) on panel assembly (93) and secure with retaining ring (16) and knob (15).

(c) Install gear assembly (87) using retaining ring (22), spring washer (21), collar (20), set screw (19), and knob (18).

(d) Install follower assembly (86), C-washer (85), spring (84), terminal (89), and screw (88) on gear assembly.

(e) Install drive assembly (29) using screw (27) and lockwasher (28).

(f) Install spring washer (26), collar (25), set screw (24), and knob assembly (23).

(g) Rotate gear assembly (87) to extreme counterclockwise position, as viewed from front, and stop against follower arm (86).

(h) Install gear stud (83) so that flat is on top side.

(i) Install dial assembly (82) on gear stud (83) using retaining ring (81).

(j) Install vernier (80) using screw (77), lockwasher (78), and washer (89) so that calibrations read as shown in detail A-1 within ± 1.0 division with respect to vernier (80).

(k) Install dial assembly (76) using retaining ring (75). Adjust zero calibration of dial assembly (82) and dial assembly (76) to coincide with index line of vernier (80).

(l) Apply glyptal to threads of set screw (62). Secure gear (63) to gear (64) using set screw (62).

(m) Insert gear (64) into bracket casting (70).

(n) Install bracket casting (70) using set screw (65), lockwashers (67 and 69), and screws (66 and 68). Install follower (30).

(o) Install terminal (74) and cable clamp (73).

(p) Secure bracket (54) to lens arm assembly (55) using screw (52) and lockwashers (53).

(q) Install lens arm assembly (55) on shaft assembly (5) and knob (1) using spacer (6), spring washer (4), washer (3), and C-washer (2).

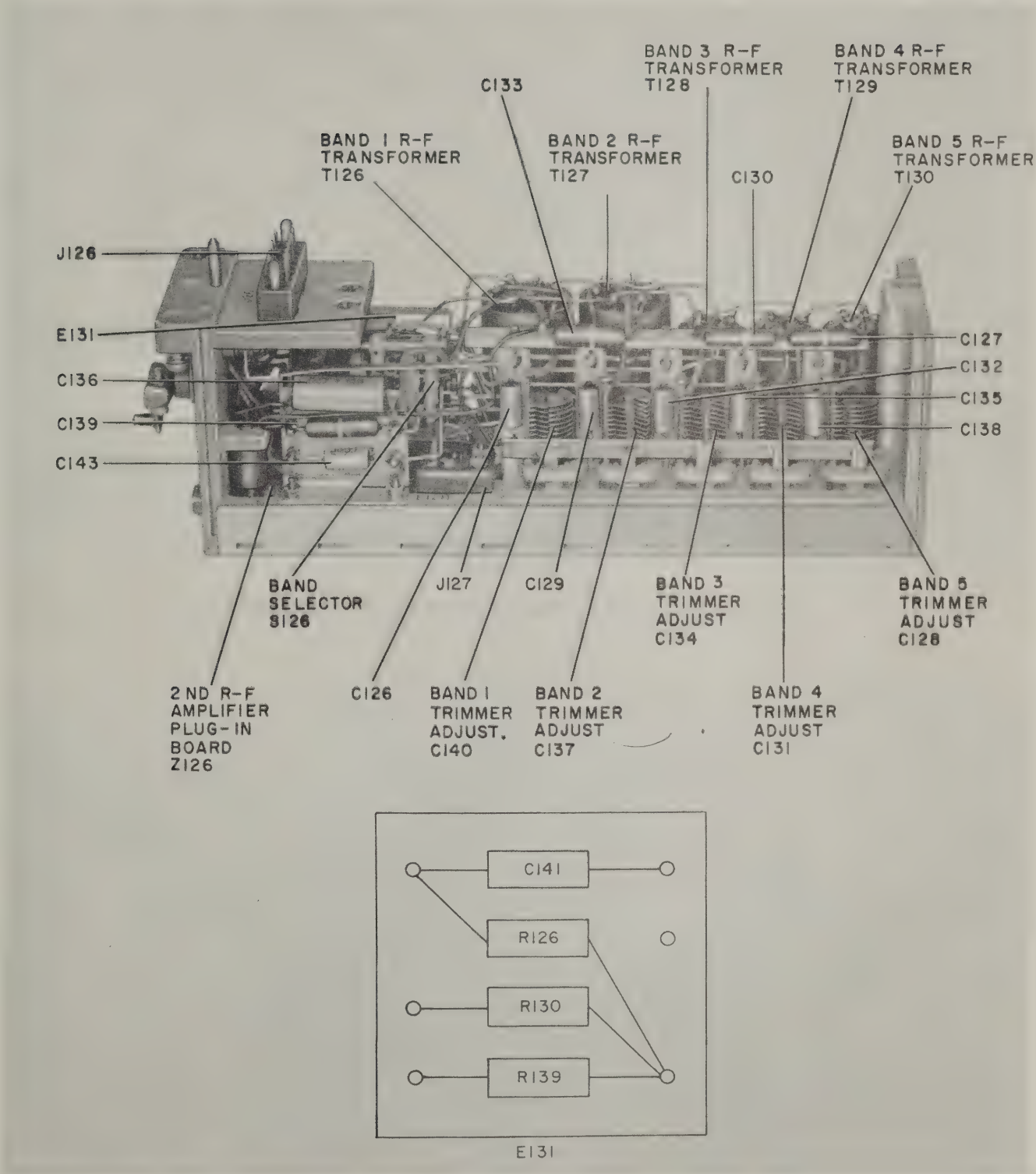


Figure 6–13. R-F Amplifier Subassembly, Right Side View, Part Location

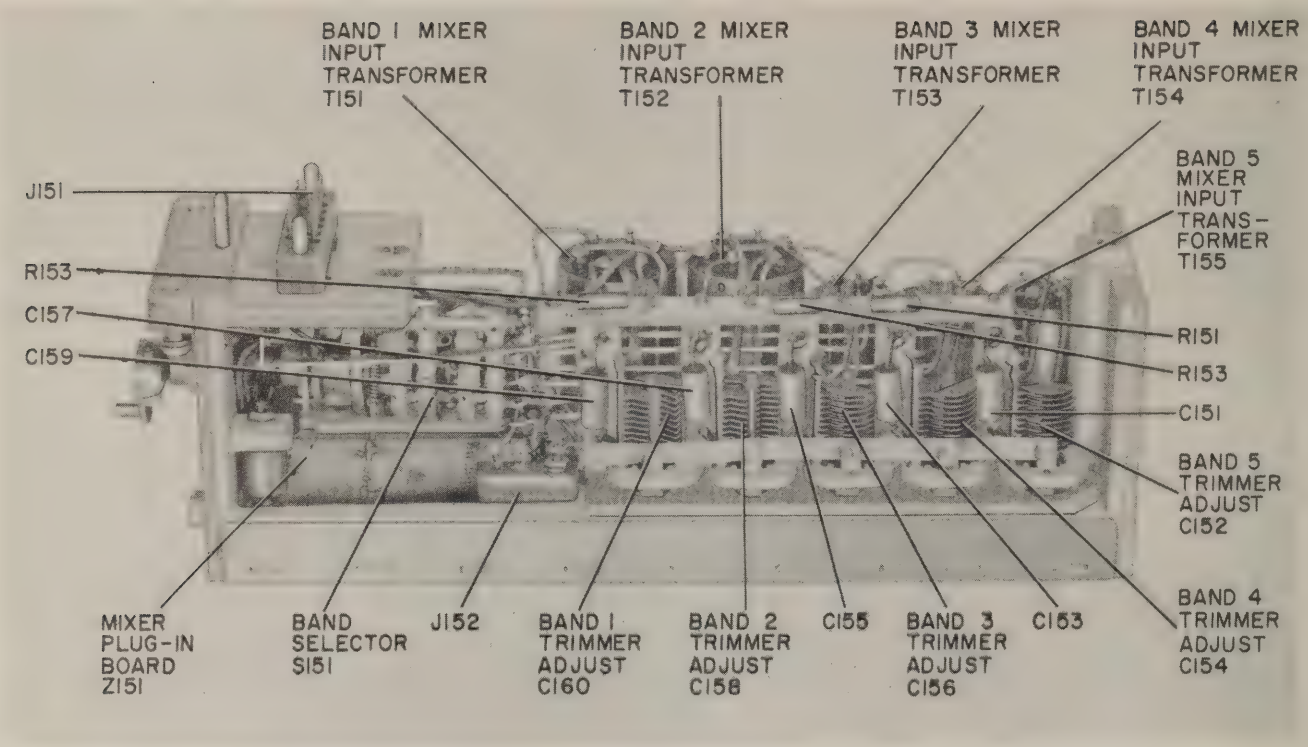


Figure 6–14. Mixer Subassembly, Right Side View, Part Location

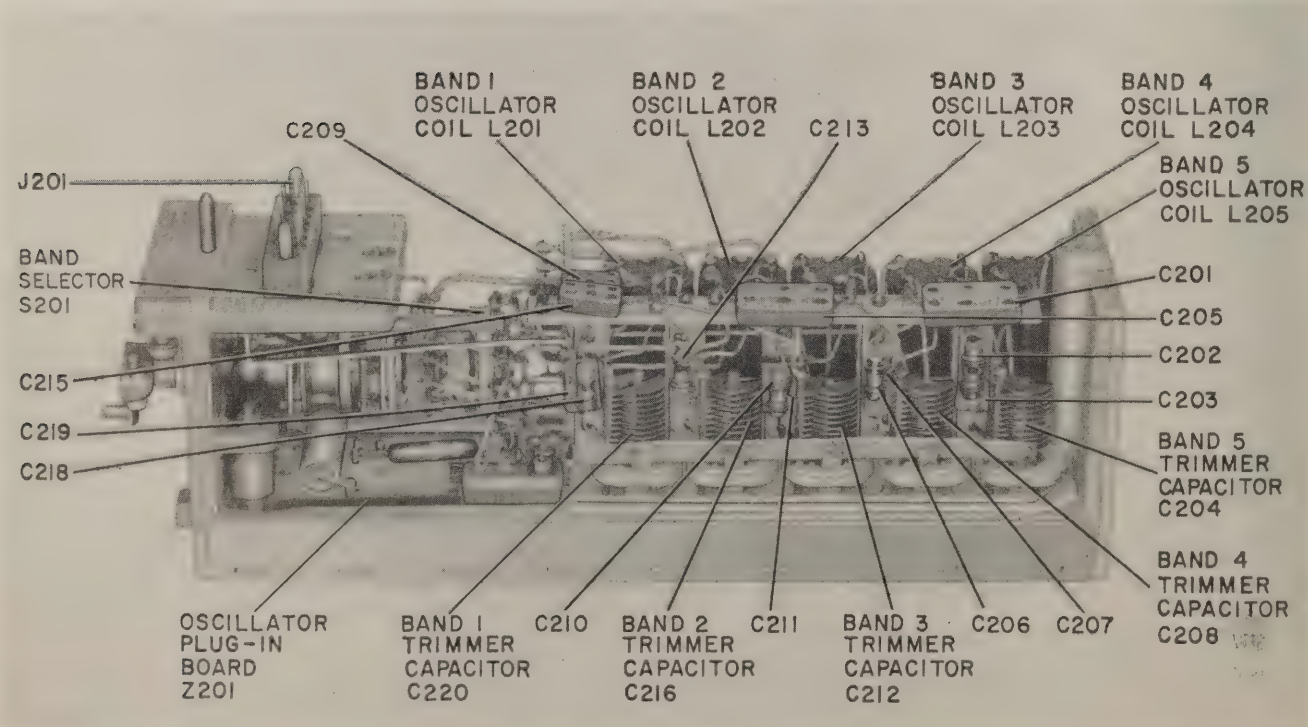


Figure 6–15. Oscillator Subassembly, Right Side View, Part Location

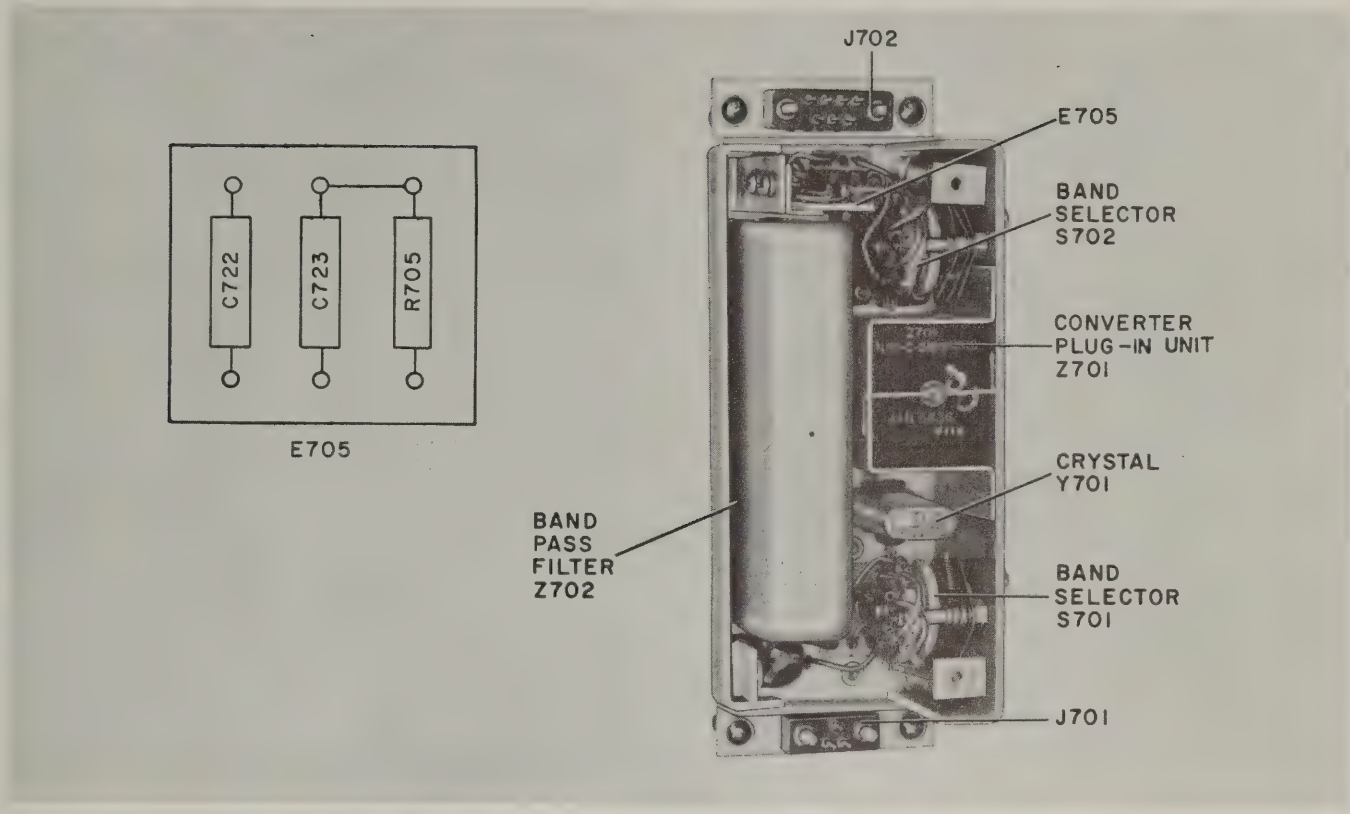


Figure 6-16. First I-F Subassembly, Top View, Part Location

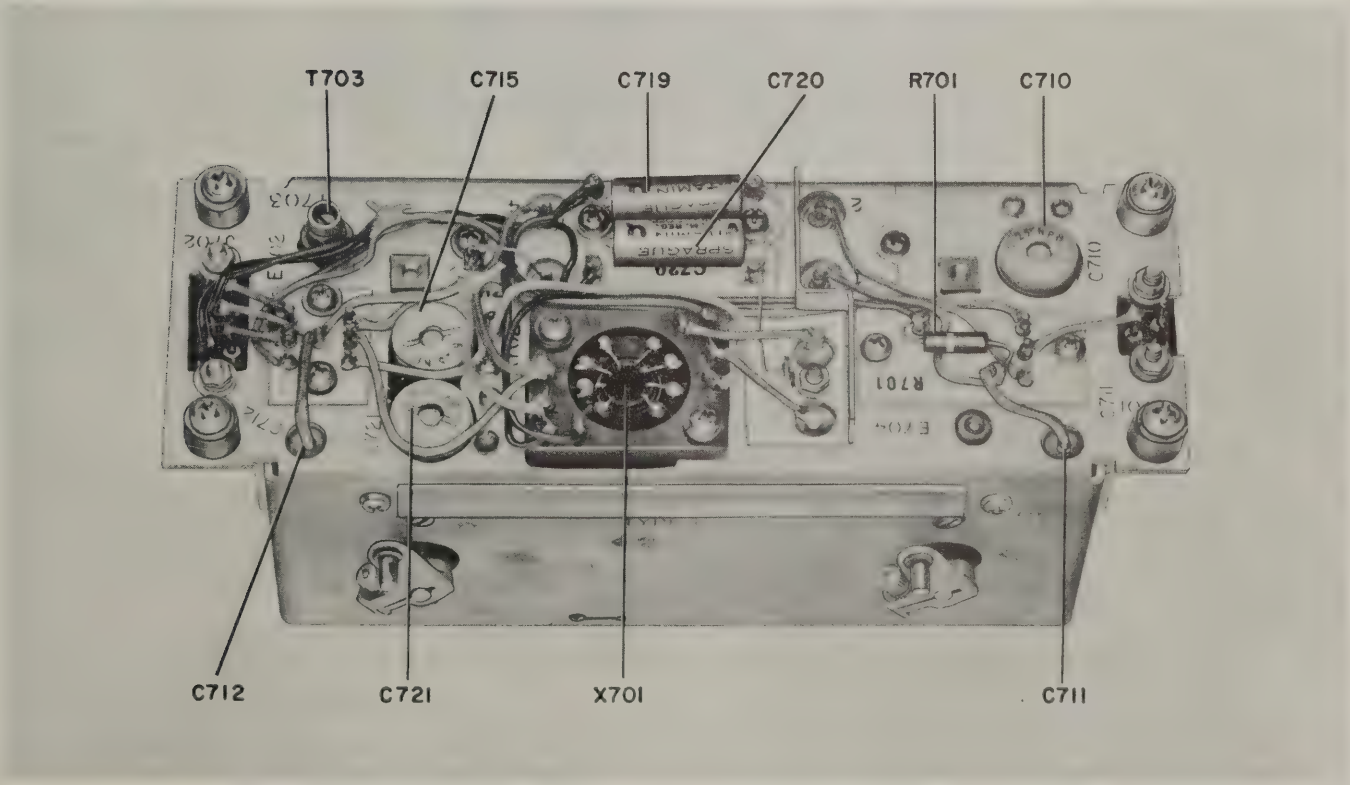


Figure 6-17. First I-F Subassembly, Bottom View, Part Location

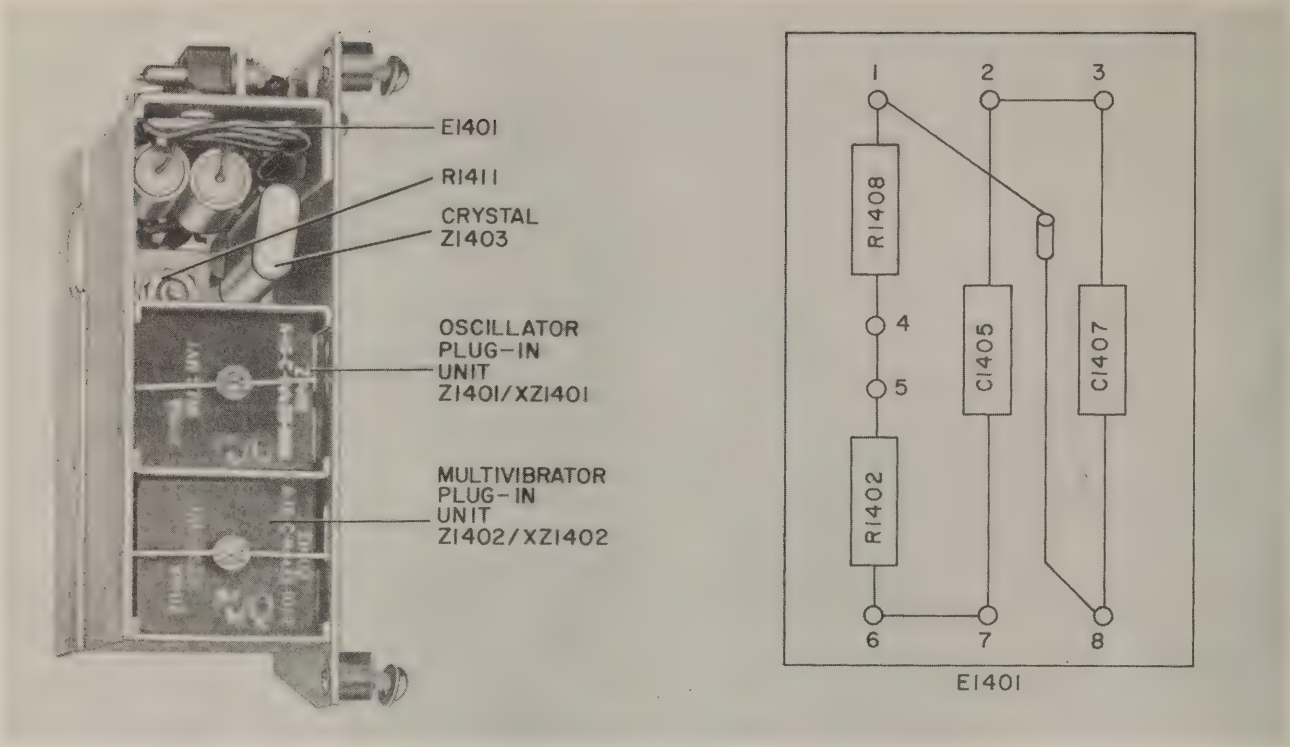


Figure 6–18. Crystal Calibrator Subassembly, Top View, Part Location

(r) Rotate gear assembly (87) to extreme counterclockwise position. Lift follower arm assembly (86) and continue to rotate gear assembly (87) until dial (82) reads 83.

(s) Install dial (50) on gear stud (83) using washers (47, 48, and 49) and retaining ring (46).

(t) Locate dial (50) so that reference line at low end is focused on an index line which is in line with vertical centerline of dial (50). Magnification of approximately 12:1 with calibration adjustment set in mid position.

(u) Apply glyptal to threads of set screw (60).

(v) Secure gear (61) to gear (63) using set screw (60). Lift follower arm assembly (86) and reverse rotation of gear assembly (87) until dials are in position shown in detail A-1.

NOTE

When knob (18) is in extreme clockwise position, dial assembly (76 and 82) should be in extreme counterclockwise position as shown in detail A-2 ± 1.0 division.

(w) Lubricate bearings and teeth of all gears sparingly. Lubricate between faces of scissor gear (59).

(x) Install scissor gear (59) using stud (58), lockwasher (57), and hex nut (56).

(y) Lead scissor gear (59) so that backlash between dial assembly (82) and dial (50) does not exceed 0.75 division of dial assembly (82) with a 16-inch-ounce load applied to the shaft of dial (50).

(z) Install spring (51).

(aa) Install coupling assembly using washer (44), lockwasher (43) and screw (42).

(ab) Install reflector (41) using lockwashers (40) and screws (39).

(ac) Install screen (38) using washers (37), lockwashers (36), and screw (35).

(ad) Install window (34) and window frame (33) using lockwashers (32) and screws (31).

(ae) Solder resistor (11) onto variable resistor (10).

(af) Install variable resistor (10) using lockwasher (9), hex nut (8), and knob (7).

(ag) Install thumbscrew (12), lockwasher (13), and lock (14).

(12) REPLACING TUNING DIAL.—To replace the tuning dial, proceed as follows:

(a) Place band selector switch in 63–133 kc position.

(b) Insert tuning dial in chassis making certain tuning capacitor shaft and dial coupling are aligned.

CAUTION

Make certain no springs, gears, or other parts of the tuning dial catch on the front panel or any subassembly.

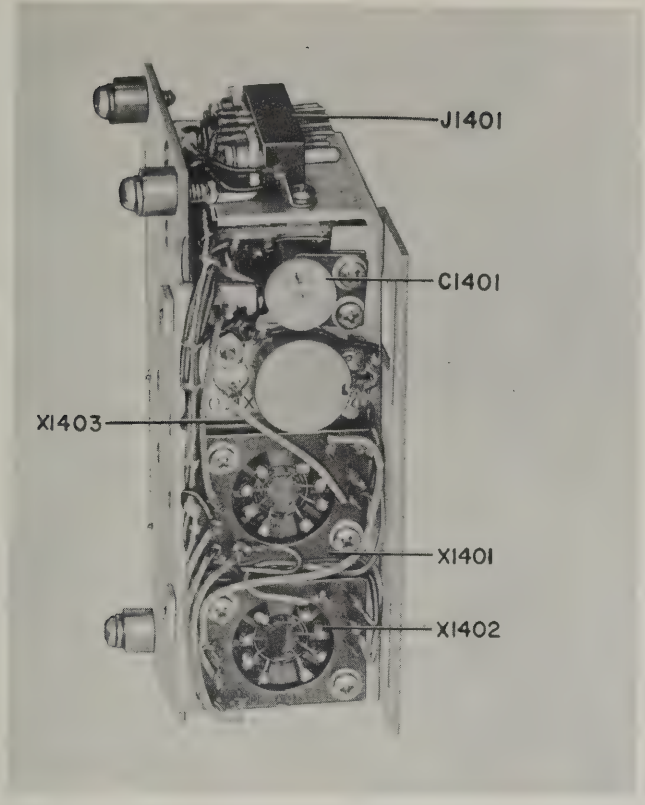


Figure 6–19. Crystal Calibrator Subassembly, Bottom View, Part Location

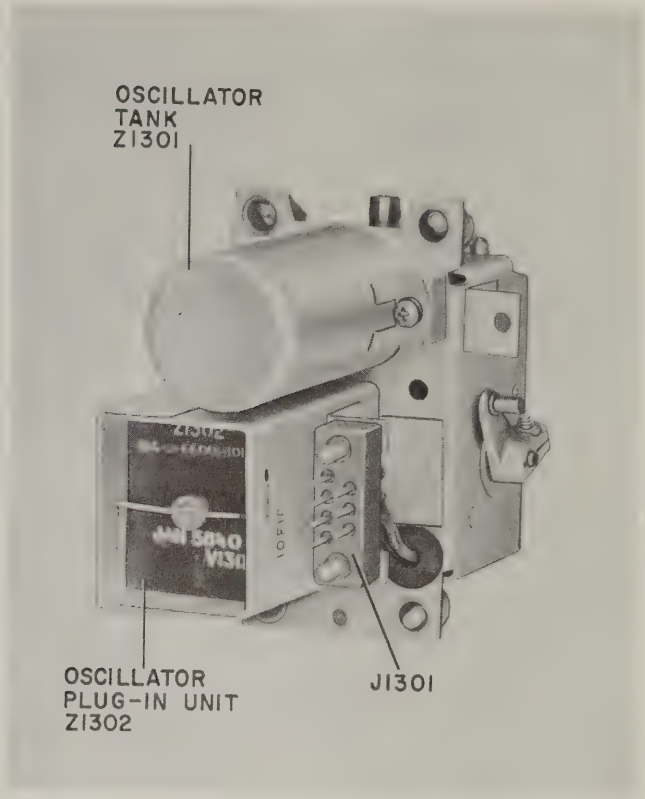


Figure 6–20. Beat Frequency Oscillator for Subassembly, Top View, Part Location

(c) Secure tuning dial to front panel with six recessed head screws.

CAUTION

Make certain no strains are set up when tightening screws.

(d) Secure rack to operate bar with two knurled screws (See B, figure 6–10.)

CAUTION

Make certain teeth mesh properly with little or no play.

NOTE

Do not tighten knurled screws until tuning dial is aligned in accordance with paragraph 6–3*b*(1).

(e) Tighten four captive screws, on mounting bracket, which hold tuning dial to chassis.

(f) Secure spade connectors to terminal board E251.

(g) Tighten two set screws on coupiing connector (B, figure 6–10) between tuning dial output shaft and tuning capacitor input shaft.

CAUTION

Make certain LAMPS switch linkage is properly engaged with lens arm stud.

(h) Align tuning dial in accordance with paragraph 6–3*b*(1).

(13) REMOVING MAIN TUNING CAPACITOR.—To remove the main tuning capacitor, proceed as follows:

(a) Remove tuning dial as outlined in steps *a* through *l* of paragraph 6–3*a*(9).

(b) Remove crystal calibrator subassembly in accordance with paragraph 6–3*a*(1).

(c) Remove main tuning capacitor straps from antenna, r-f, mixer, and oscillator subassemblies.

(d) Remove oscillator and first i-f subassembly as outlined in paragraph 6–3*a*(4).

(e) Hold main tuning capacitor and remove three nuts from tuning capacitor studs.

(f) Carefully remove tuning capacitor.

(14) REPLACING MAIN TUNING CAPACITOR.—To replace the main tuning capacitor, proceed as follows:

(a) Position main tuning capacitor on chassis and secure with three nuts.

(b) Replace first i-f and oscillator subassembly in accordance with paragraph 6–3*a*(5).

(c) Attach main tuning capacitor straps to associated subassembly.

(d) Replace crystal calibrator subassembly in accordance with paragraph 6–3*a*(1).

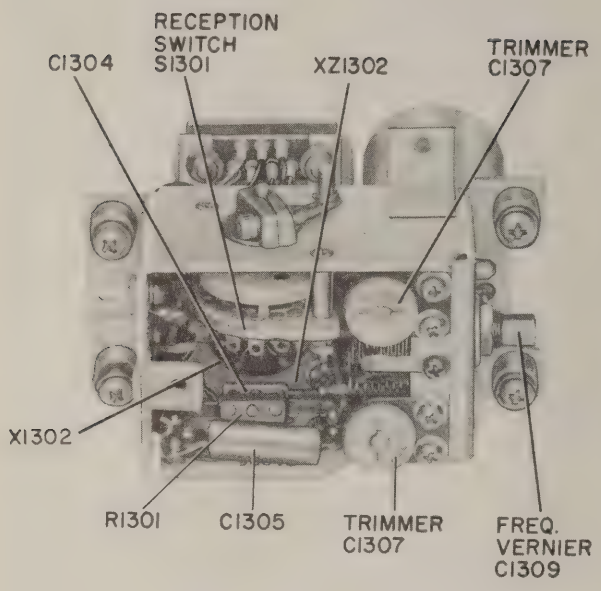


Figure 6–21. Beat Frequency Oscillator Subassembly, Bottom View, Part Location

(e) Replace tuning dial in accordance with paragraph 6–3*a*(12).

b. ALIGNMENT PROCEDURES.—The following paragraphs outline the procedures used to align the tuning dial, RECEPTION switches and bandselector switches.

(1) TUNING DIAL.—Align the tuning dial after installation as follows:

(a) Set band switch to 63–133 kc position and CAL. ADJUST control to zero position.

(b) Make certain Allen-head set screws on coupling connector between tuning dial assembly output shaft and tuning capacitor input shaft, and captive screws on mounting brackets are loose. (See A and B, figure 6–10.)

(c) Turn tuning capacitor fully counterclockwise by turning input shaft arm (A, figure 6–10).

(d) Rotate tuning control knob fully counterclockwise.

(e) Release stop by lifting follower arm (B, figure 6–10) and continue rotating knob counterclockwise until linear scale reads 83.

(f) Tighten coupling set screws and captive screws.

(g) Adjust vertical adjustment screws (A, figure 6–10) so that vertical line of projected dial coincides with index line on screen.

NOTE

This procedure is continued on page 6–56.

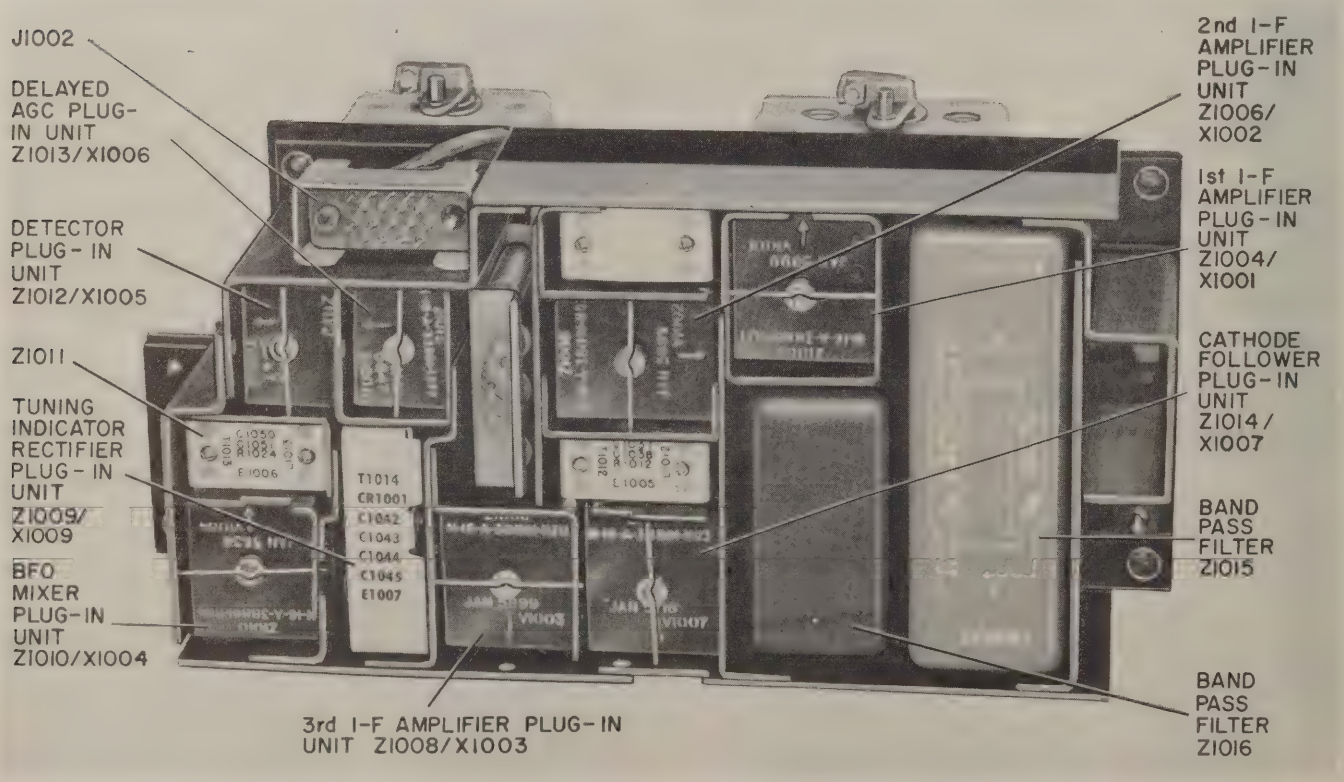


Figure 6–22. Second I-F Amplifier Subassembly, Top View, Location of Plug-in Units

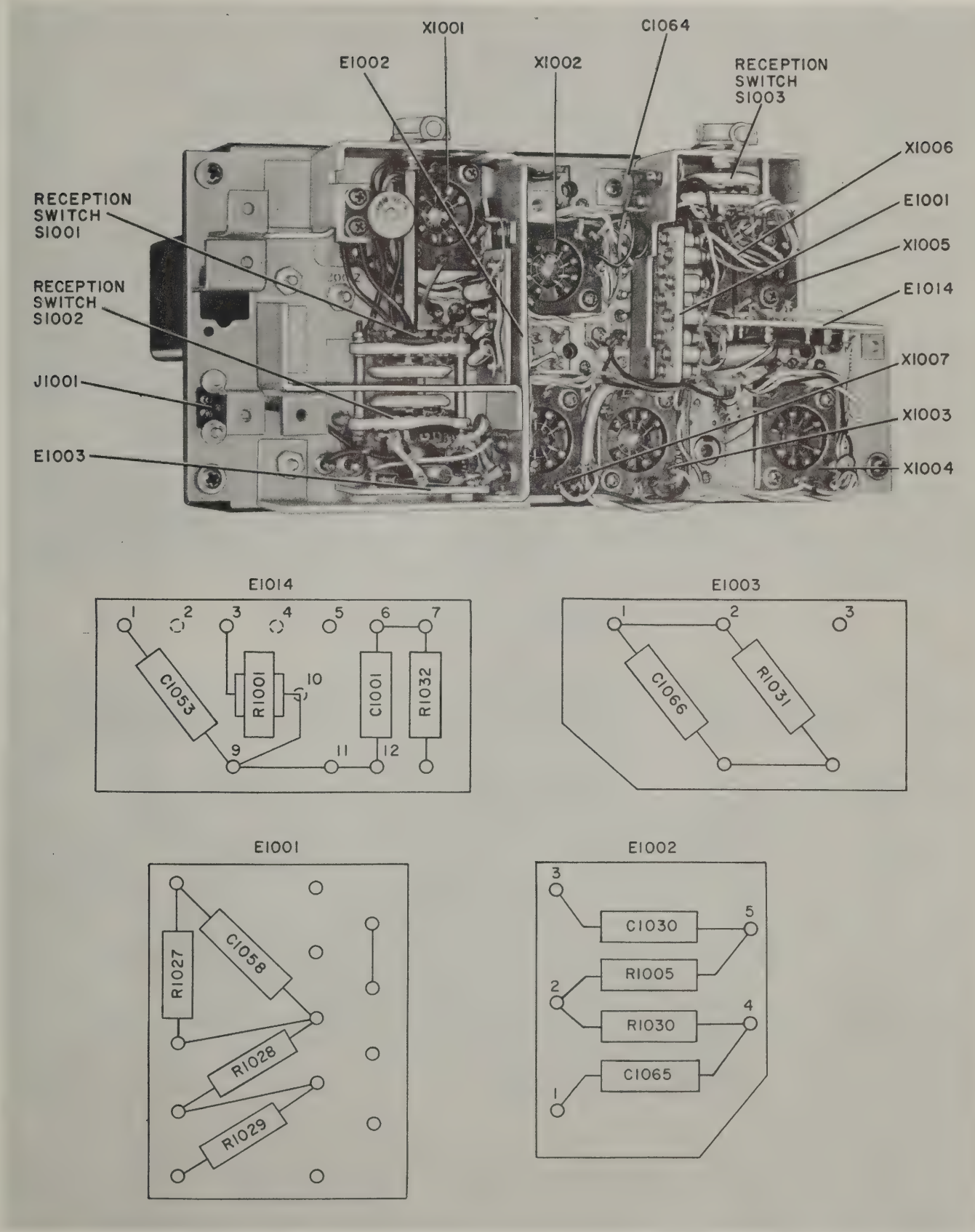


Figure 6-23. Second I-F Amplifier Subassembly, Bottom View, Location of Parts

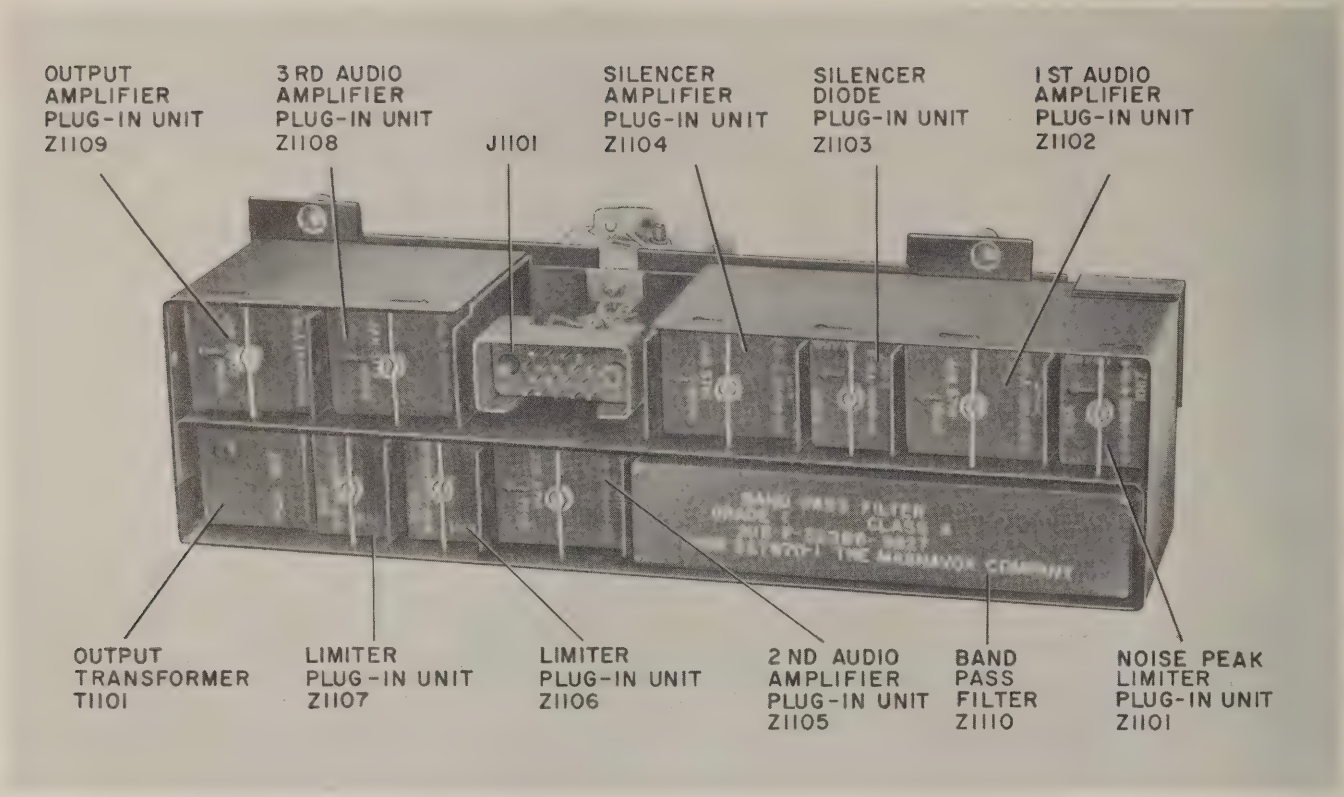


Figure 6–24. Audio Subassembly, Top View, Location of Plug-in Units

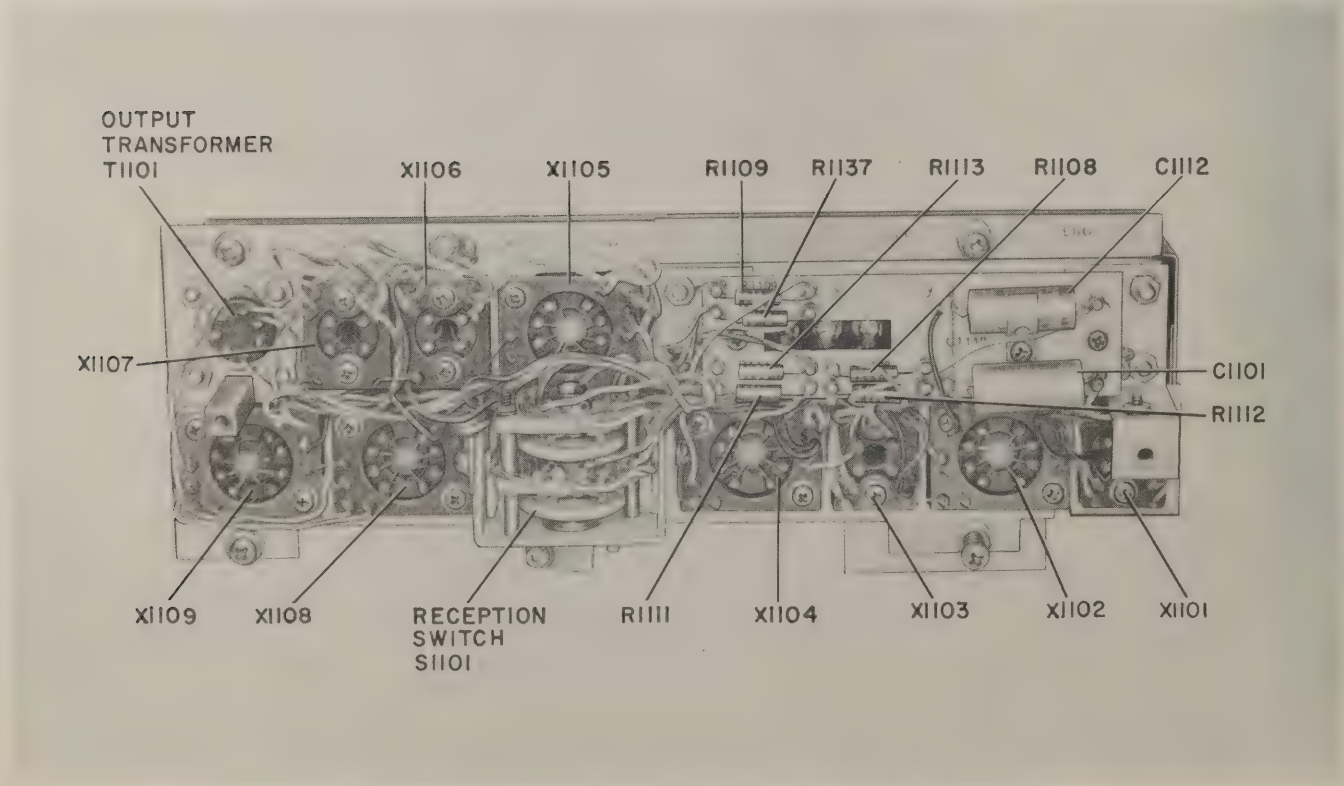


Figure 6–25. Audio Subassembly, Bottom View, Location of Parts

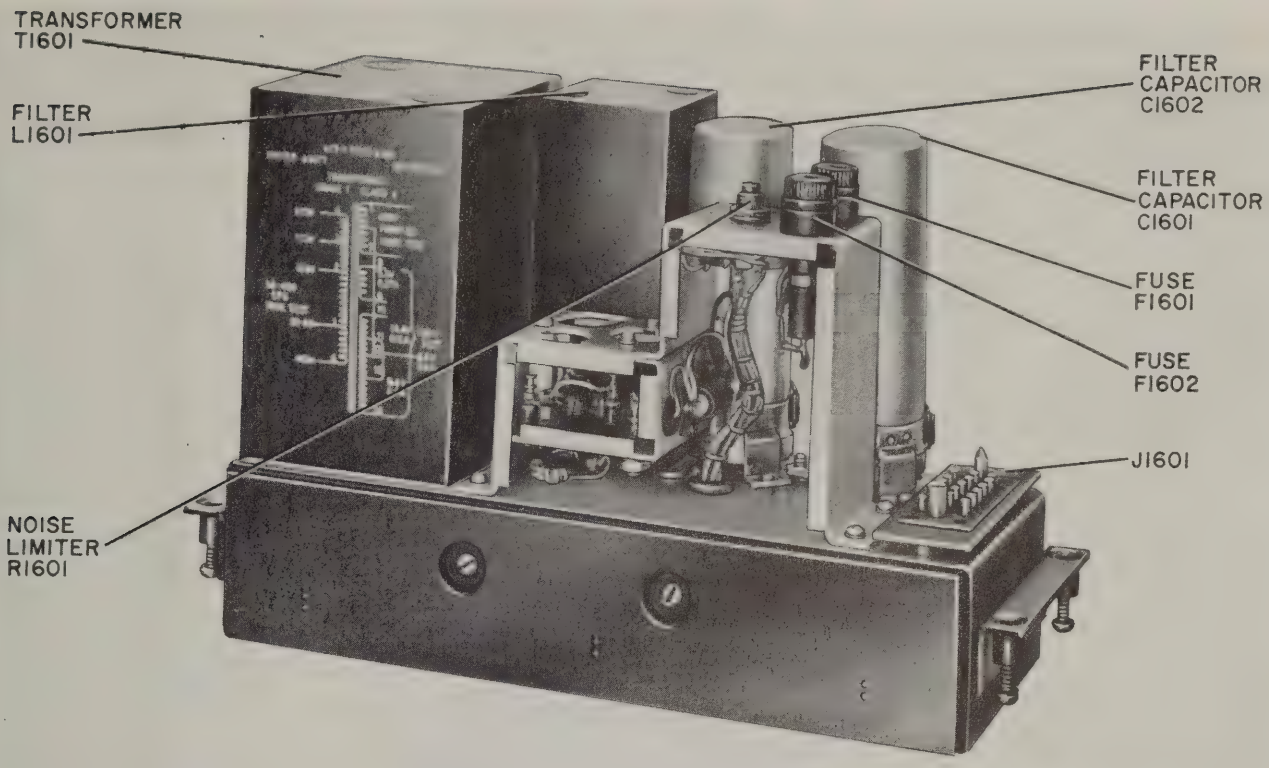


Figure 6-26. Power Supply Subassembly, Three Quarter Side View, Part Location

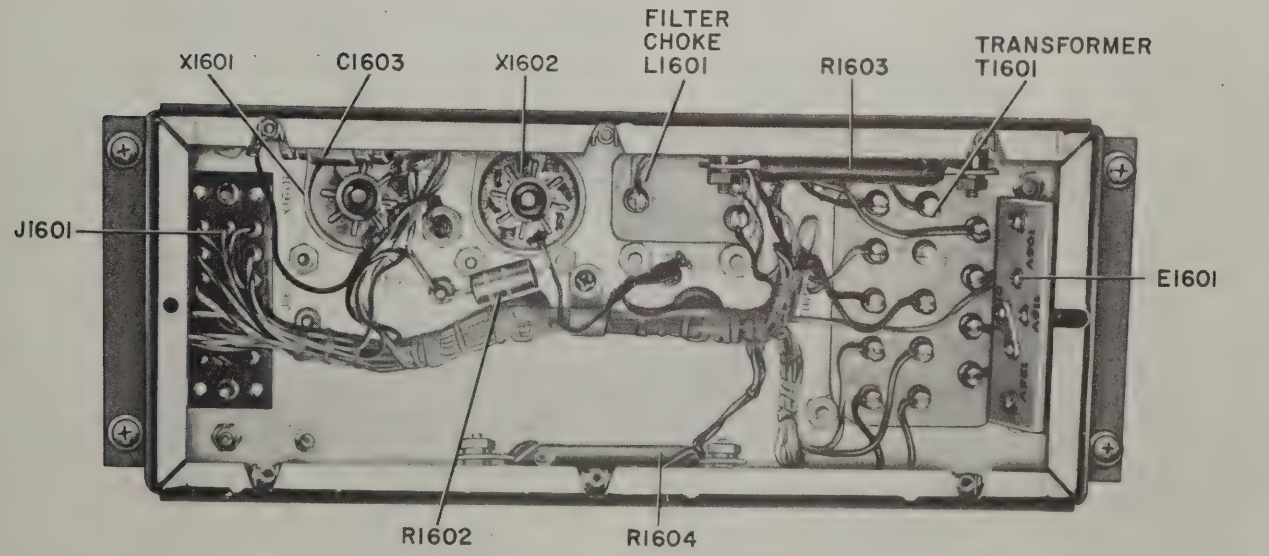


Figure 6-27. Power Supply Subassembly, Bottom View, Part Location

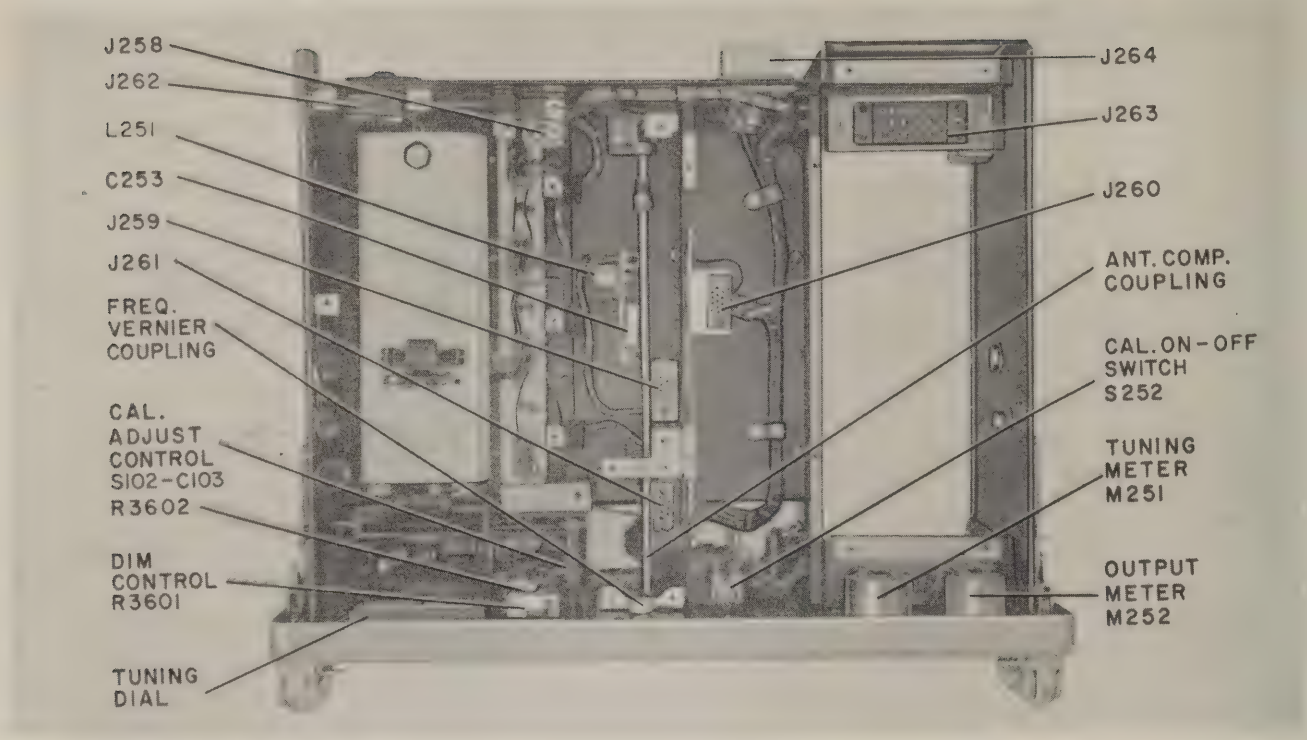


Figure 6–28. Receiver Chassis, Top View, Part Location

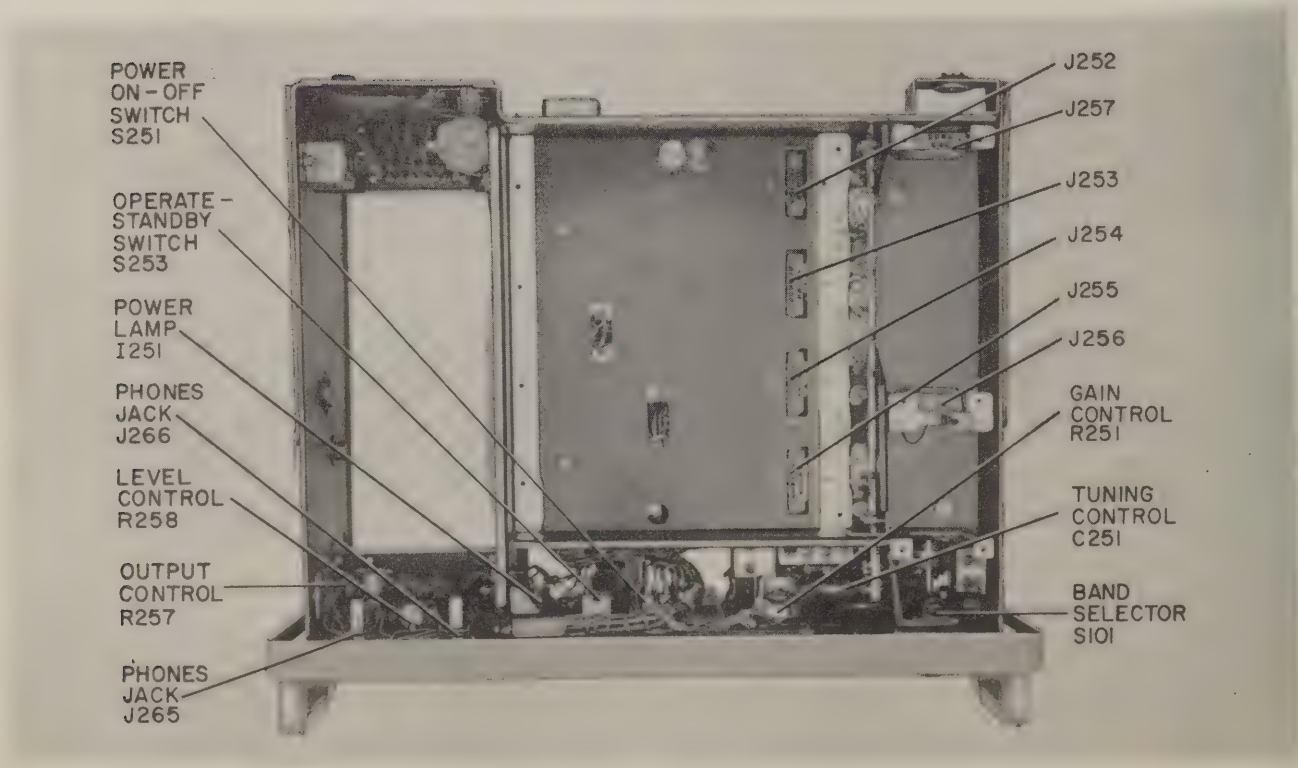


Figure 6–29. Receiver Chassis, Bottom View, Part Location

COMPONENT	COORDINATE
X1003	45B, 46B, 45A, 46A
X1004	46D, 47D, 46C, 47C
X1005	48B, 49B, 48A, 49A
X1006	39C, 40C, 39D, 40D
X1007	44D, 45D, 44C, 45C
X1101	59B, 60B, 60A
X1102	55B, 55A
X1103	56C, 56D
X1104	54D, 55D, 54C, 55C
X1105	57D, 58D, 57C, 58C
X1106	59D, 60D, 59C, 60C
X1107	61D, 62D, 61C, 62C
X1108	63D, 64D, 63C, 64C
X1109	65D, 65C
X1301	35I, 36I, 37I, 35H, 36H, 37H
X1401	23H, 24H, 23G, 24G
X1402	25H, 26H, 25G, 26G
X1601	59I
X1602	58I
X1603	57I
X1605	56I
X3601	45H
X3602	45H
Y701	24B
Y1401	22G
Z101	2G, 3G, 2F, 3F
Z126	7G, 8G, 7F, 8F
Z151	12G, 13G, 12F, 13F
Z201	18G, 19G, 17F, 18F
Z701	24D, 25D, 24C, 25C
Z702	23C
Z1004	39B, 40B, 39A, 40A
Z1006	42B, 43B, 42A, 43A
Z1008	45B, 46B, 45A, 46A
Z1009	48D, 49D, 48C, 49C
Z1010	46D, 47D, 46C, 47C
Z1011	47B, 47A
Z1012	48B, 49B, 48A, 49A
Z1013	39D, 40D, 39C, 40C
Z1014	44D, 45D, 44C, 45C
Z1015	56A
Z1016	36B
Z1017	40B, 41B, 40A, 41A
Z1018	43B, 44B, 43A, 44A
Z1101	59B, 60B, 60A
Z1102	55B, 55A
Z1103	56D, 56C
Z1104	54D, 55D, 54C, 55C
Z1105	57D, 58D, 57C, 58C
Z1106	59D, 60D, 59C, 60C
Z1107	61D, 62D, 61C, 62C
Z1108	63D, 64D, 63C, 64C
Z1109	65D, 65C
Z1110	58B
Z1301	34H
Z1302	35I, 36I, 37I, 35H, 36H, 37H
Z1401	23H, 24H, 23G, 24G
Z1402	25H, 26H, 25G, 26G
Z1701	62I
Z1702	64I
Z1703	65I

Figure 6–30. Radio Receiving Set AN/SRR–11A, Schematic Diagram (Sheet 1 of 3)

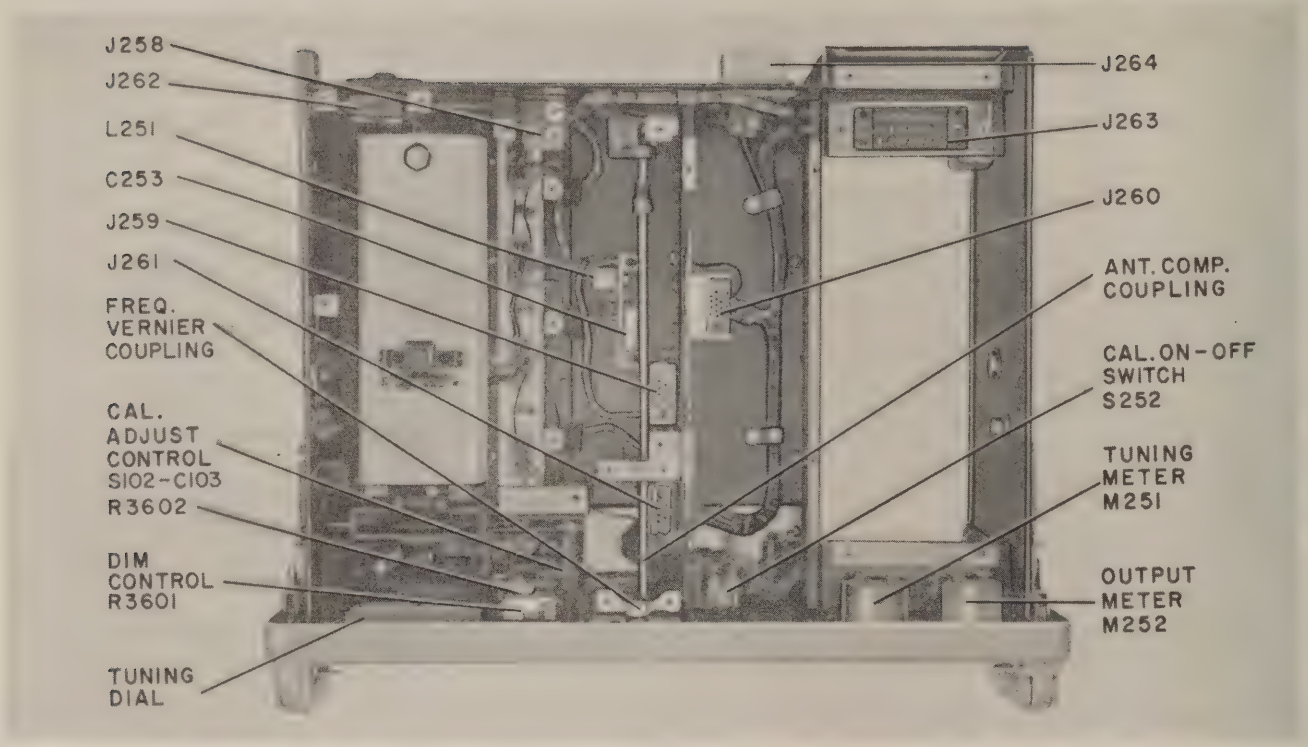


Figure 6–28. Receiver Chassis, Top View, Part Location

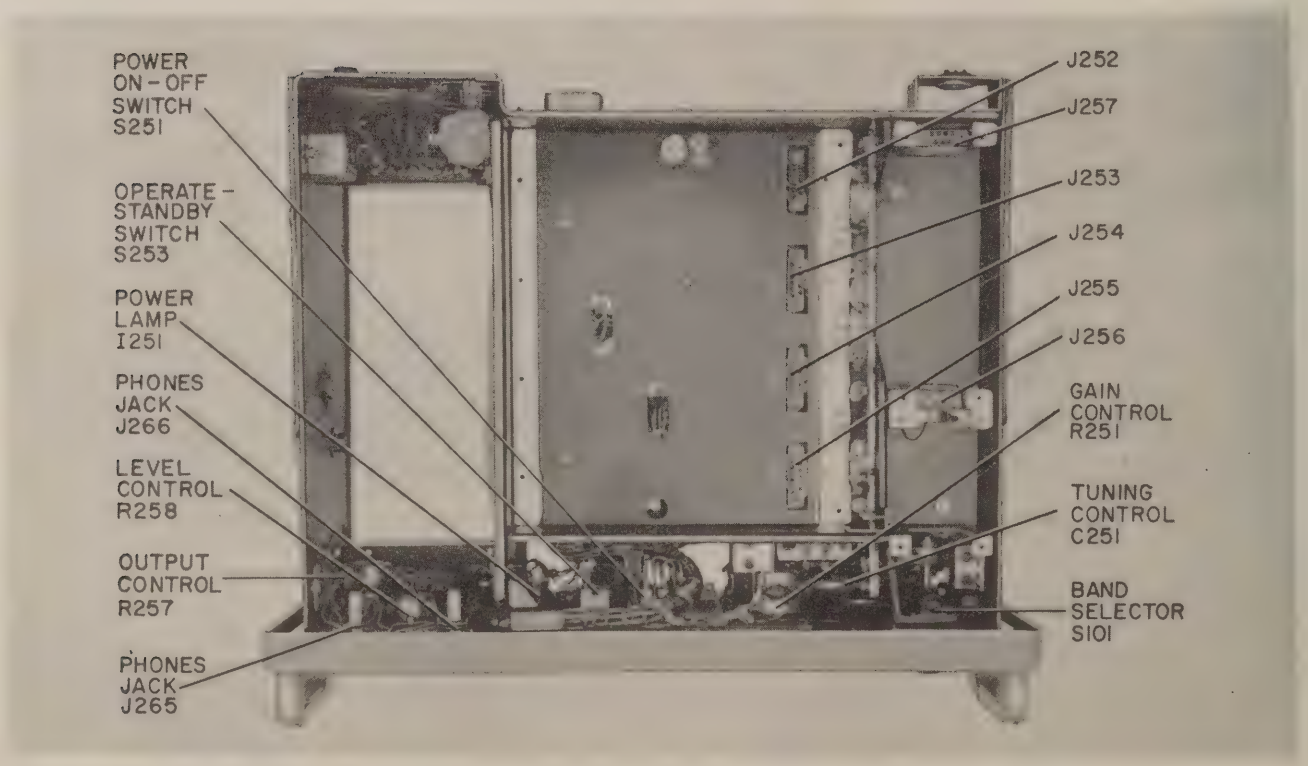
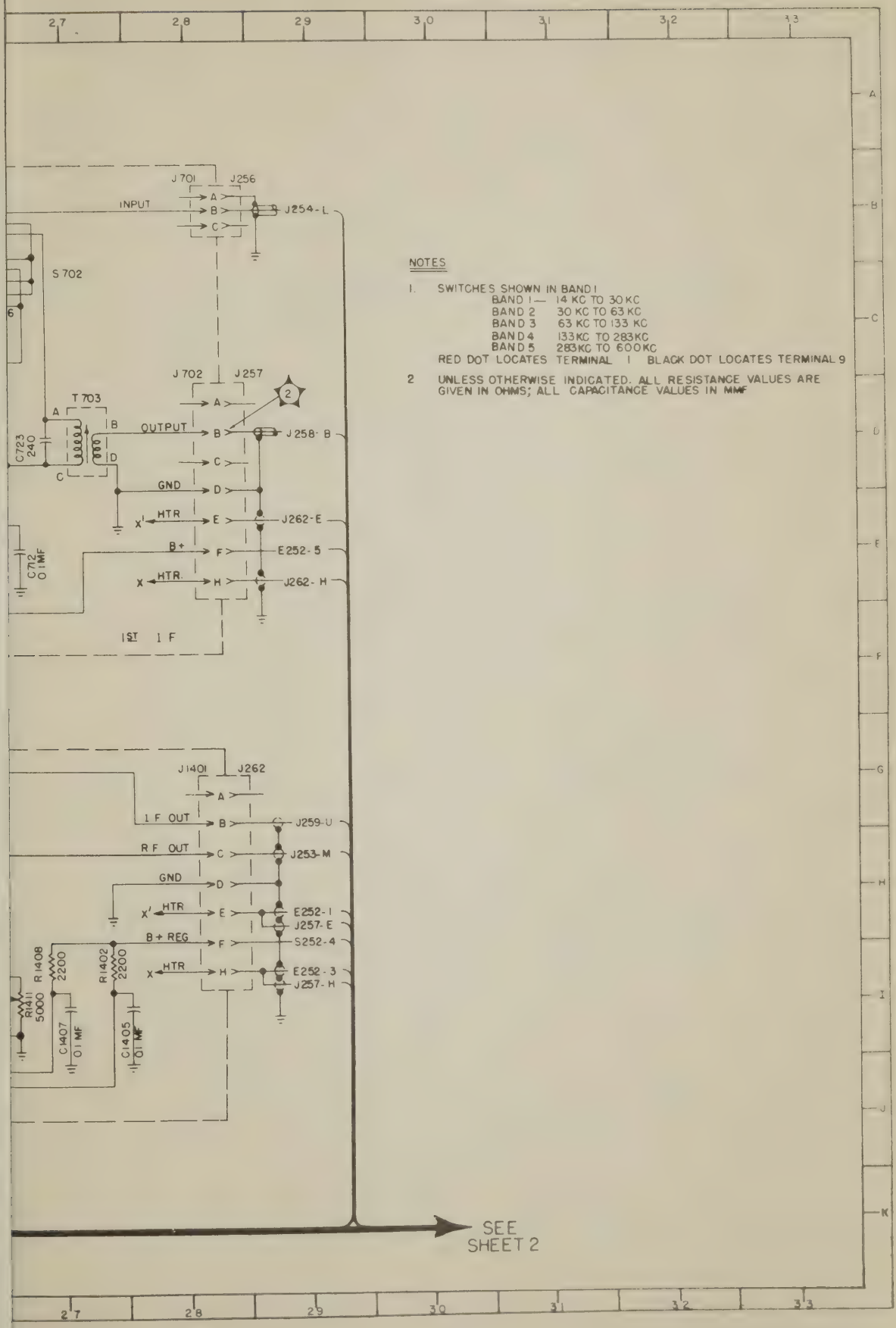


Figure 6–29. Receiver Chassis, Bottom View, Part Location

COMPONENT LOCATION BY COORDINATES FOR FIGURE 6-30

COMPONENT	COORDINATE	COMPONENT	COORDINATE	COMPONENT	COORDINATE	COMPONENT	COORDINATE	COMPONENT	COORDINATE	COMPONENT	COORDINATE	COMPONENT	COORDINATE
C101	5H	C717	25C	C1601	59I	L1016	41A	R1025	45D	S151	13B, 13E	X1003	45B, 46B, 45A, 46A
C102	1G	C718	24D	C1602	58I	L1017	44A	R1027	50D	S151A	13E	X1004	46D, 47D, 46C, 47C
C103	4A	C719	24D	C1603	60I	L1601	57I, 58I	R1028	51C	S151B	13B	X1005	48B, 49B, 48A, 49A
C104	3G	C720	25D	CR1001	49C	L1601A	57I	R1029	51D	S201	18B, 18E	X1006	39C, 40C, 39D, 40D
C105	3G	C721	26C	CR1601	56J	L1601B	58I	R1030	41D	S201A	18E	X1007	44D, 45D, 44C, 45C
C106	2G	C722	26C	CR1602	57J	M251	46H	R1031	35A	S201B	18B	X1101	59B, 60B, 60A
C107	2F	C723	26C	CR1603	56J	M252	47H	R1032	47D	S251	43I	X1102	55B, 55A
C126	10B	C1001	48D	CR1604	57J	O101	2G	R1033	47D	S252	43H	X1103	56C, 56D
C127	9B	C1027	37C	E101	4A	O102	2G	R1036	43B	S253	43I	X1104	54D, 55D, 54C, 55C
C128	10B	C1030	38D	E102	4A	O1001	51C	R1101	60B	S254	46H	X1105	57D, 58D, 57C, 58C
C129	10C	C1031	39B	E126	9A	O1002	51C	R1102	59A	S255	48H	X1106	59D, 60D, 59C, 60C
C130	9E	C1032	39B	E127	9A	O1003	51D	R1103	59B	S701	23B	X1107	61D, 62D, 61C, 62C
C131	10C	C1035	42B	E151	15A	O1601	54H	R1104	59B	S702	26B	X1108	63D, 64D, 63C, 64C
C132	10E	C1036	43B	E152	14A	R101	5G	R1105	60B	S1001	35B	X1109	65D, 65C
C133	9F	C1039	45B	E201	19A	R102	5F	R1106	55B	S1002	38B	X1301	35I, 36I, 37I, 35H, 36H, 37H
C134	10E	C1040	41A	E202	19A	R103	5D	R1107	55B	S1003	50B	X1401	23H, 24H, 23G, 24G
C135	10F	C1041	46B	E251	44H, 45H	R104	5D	R1108	52B	S1101	54B, 56B	X1402	25H, 26H, 25G, 26G
C136	9H	C1042	48C	E252	49I, 50I, 51I	R105	5C	R1109	56B	S1101A	54B	X1601	59I
C137	10F	C1043	48D	E253	52I, 52H, 52G	R106	1H	R1111	57A	S1101B	56B	X1602	58I
C138	10H	C1044	48C	E255	2J	R107	5H	R1112	54B	S1301	38H	X1603	57I
C139	8B	C1045	49D	E256	48G, 49G, 50G, 51G	R108	2G	R1113	53A	S3601	45H	X1605	56I
C140	10H	C1046	44A	F1601	58H	R109	3G	R1114	55D	T101	5H	X3601	45H
C141	10I	C1047	48C	F1602	59H	R126	10H	R1115	57D	T102	5F	X3602	45H
C142	8G	C1048	46C	I251	44I	R127	7G	R1116	56D	T103	5E	Y701	24B
C143	6I	C1049	47D	I3601	45H	R128	8G	R1117	56C	T104	5C	Y1401	22G
C151	16B	C1050	47B	I3602	45H	R129	9H	R1118	55C	T105	5B	Z101	2G, 3G, 2F, 3F
C152	16B	C1051	47B	J101	2I, 3I, 4I	R130	9I	R1119	53D	T126	9H	Z126	7G, 8G, 7F, 8F
C153	16C	C1052	47B	J102	1G, 1F	R131	8G	R1120	54D	T127	9F	Z151	12G, 13G, 12F, 13I
C154	16C	C1053	50D	J103	2H, 3H	R151	15E	R1121	54C	T128	9E	Z201	18G, 19G, 17F, 18I
C155	16E	C1054	44C	J126	7I, 8I, 9I	R152	15F	R1122	57D	T129	9C	Z701	24D, 25D, 24C, 25C
C156	16E	C1055	44D	J127	6F	R153	15H	R1123	58D	T130	9B	Z702	23C
C157	16F	C1056	45C	J128	7H, 8H	R154	12G	R1124	58C	T151	15H	Z1004	39B, 40B, 39A, 40A
C158	16F	C1057	40B	J151	12I, 13I, 14I	R155	12G	R1125	59D	T152	16F	Z1006	42B, 43B, 42A, 43A
C159	16H	C1058	50D	J152	12F	R156	13G	R1126	59D	T153	15E	Z1008	45B, 46B, 45A, 46A
C160	16H	C1059	41B	J153	12H, 13H	R201	18F	R1128	61D	T154	15C	Z1009	48D, 49D, 48C, 49C
C161	12G	C1060	42D	J201	18I, 19I	R202	17G	R1129	62D	T155	15B	Z1010	46D, 47D, 46C, 47C
C162	13G	C1061	42F	J202	17F	R203	19G	R1130	62D	T703	27C	Z1011	47B, 47A
C201	20B	C1062	42F	J203	18H, 19H	R204	19G	R1131	62D	T1013	47A	Z1012	48B, 49B, 48A, 49A
C202	20B	C1063	47D	J252	2I, 3I, 4I	R205	19F	R1132	64D	T1014	49C	Z1013	39D, 40D, 39C, 40C
C203	21B	C1064	42C	J253	7I, 8I, 9I	R251	41I, 42I	R1133	63D	T1015	41A	Z1014	44D, 45D, 44C, 45C
C204	21B	C1065	41D	J254	12I, 13I, 14I	R251A	41I	R1134	64D	T1016	44A	Z1015	56A
C205	20C	C1066	35A	J255	18I, 19I	R251B	42I	R1135	64D	T1101	66C	Z1016	36B
C206	20C	C1067	44B	J256	28A	R252	48G	R1136	64D	T1601	55I, 55H	Z1017	40B, 41B, 40A, 41A
C207	21C	C1068	44B	J257	28D, 28C	R253	49G	R1137	52B	V101	2G	Z1018	43B, 44B, 43A, 44A
C208	21C	C1101	59B	J258	41F	R254	50G	R1138	63D	V126	7G	Z1101	59B, 60B, 60A
C209	20D	C1102	55A	J259	43F, 44F, 45F, 46F, 47F	R255	49G	R1301	37H	V151	13G	Z1102	55B, 55A
C210	20E	C1103	56D	J260	57E, 58E, 59E, 60E, 61E	R257	47I, 48I	R1302	36I	V201	18G	Z1103	56D, 56C
C211	21E	C1104	55D	J261	40I, 40H	R257A	47I	R1303	37H	V701	24C	Z1104	54D, 55D, 54C, 55C
C212	21E	C1105	57C	J262	28H, 28G, 28F	R257B	48I	R1304	37H	V1001	39A	Z1105	57D, 58D, 57C, 58C
C213	20F	C1106	58D	J263	54G–60G	R258	46I	R1305	35H	V1002	42A	Z1106	59D, 60D, 59C, 60C
C214	20F	C1107	59C	J264	61G–66G	R259	50G	R1401	23H	V1003	46B	Z1107	61D, 62D, 61C, 62C
C215	21F	C1108	61C	J265	46I	R260	50G	R1402	27H	V1004	47C	Z1108	63D, 64D, 63C, 64C
C216	21F	C1109	63C	J266	47I	R263	45I	R1403	24H	V1005	49A	Z1109	65D, 65C
C217	20G	C1110	65C	J701	28A	R264	51G	R1404	23H	V1006	39C	Z1110	58B
C218	20G	C1112	53B	J702	28D, 28C	R701	23D	R1405	24H	V1007	45C	Z1301	34H
C219	21G	C1114	60A	J1001	41F	R702	25D	R1406	26H	V1101	60A	Z1302	35I, 36I, 37I, 35H, 36H, 37H
C220	21G	C1115	55C	J1002	43F–47F	R703	24D	R1407	25H	V1102	55A	Z1401	23H, 24H, 23G, 24G
C223	18F	C1301	36H	J1101	57E–61E	R704	24D	R1408	26H	V1103	56C	Z1402	25H, 26H, 25G, 26G
C224	19G	C1302	36H	J1301	40I, 40H	R705	26D	R1409	26G	V1104	54C	Z1701	62I
C225	19G	C1303	35H	J1401	28H, 28G, 28F	R1001	43C	R1410	25H	V1105	58C	Z1702	64I
C226	18F	C1304	37H	J1601	54G–60G	R1005	37D	R1411	26H	V1106	60C	Z1703	65I
C227	18G	C1305	37H	J1701	65J	R1006	39B	R1601	57H	V1107	61C		
C251	4A, 9A, 14A, 19A	C1306	37G	J1702	65J	R1007	40B	R1602	59H	V1108	63C		
C251A	19A	C1307	39H	J1704	64J	R1009	40B	R1603	58I	V1109	65C		
C251B	14A	C1308	39H	J1705	62J	R1010	42B	R1604	58I	V1301	36H		
C251C	9A	C1309	39H	J1707	62J	R1011	43B	R1605	56H	V1401	23H		
C251D	4A	C1401	22H	J1709	60G–66G	R1013	43B	R1607	57I	V1402	25H		
C252	55G	C1402	23H	K1701	63I	T1014	45B	R3601	45H	VR1601	57H		
C253	52I	C1403	24G	L201	20G	R1015	47C	R3602	45H	VR1602	57H		
C254	52H	C1404	24G	L202	20F	R1016	48C	S101	2E, 2B	VR1603	60J		
C710	22C	C1405	27H	L203	20E	R1017	46C	S101A	2E	X251	44I		
C711	22D	C1406	23G	L204	20C	R1019	46D	S101B	2B	X701	24B		
C712	26D	C1407	27H	L205	20B	R1020	46D	S102	1H	X702	24D, 25D, 24C, 25C		
C714	25C	C1408	23G	L251	52G	R1021	47D	S126	7B, 7E	X1001	39B, 40B, 39A, 40A		
C715	23D	C1409	25G	L252	55G	R1023	44D	S126A	7E	X1002	42B, 43B, 42A, 43A		
C716	24C	C1410	25G	L1013	47A	R1024	47D	S126B	7B				

Figure 6-30. Radio Receiving Set AN/SRR-11A Schematic Diagram (Sheet 1 of 3)



NOTES

1. SWITCHES SHOWN IN BAND 1
   BAND 1 — 14 KC TO 30 KC
   BAND 2 30 KC TO 63 KC
   BAND 3 63 KC TO 133 KC
   BAND 4 133 KC TO 283 KC
   BAND 5 283 KC TO 600 KC
   RED DOT LOCATES TERMINAL 1 BLACK DOT LOCATES TERMINAL 9
2. UNLESS OTHERWISE INDICATED. ALL RESISTANCE VALUES ARE GIVEN IN OHMS; ALL CAPACITANCE VALUES IN MMF

Figure 6–30. Radio Receiving Set AN/SRR–11A, Schematic Diagram (Sheet 2 of 3)

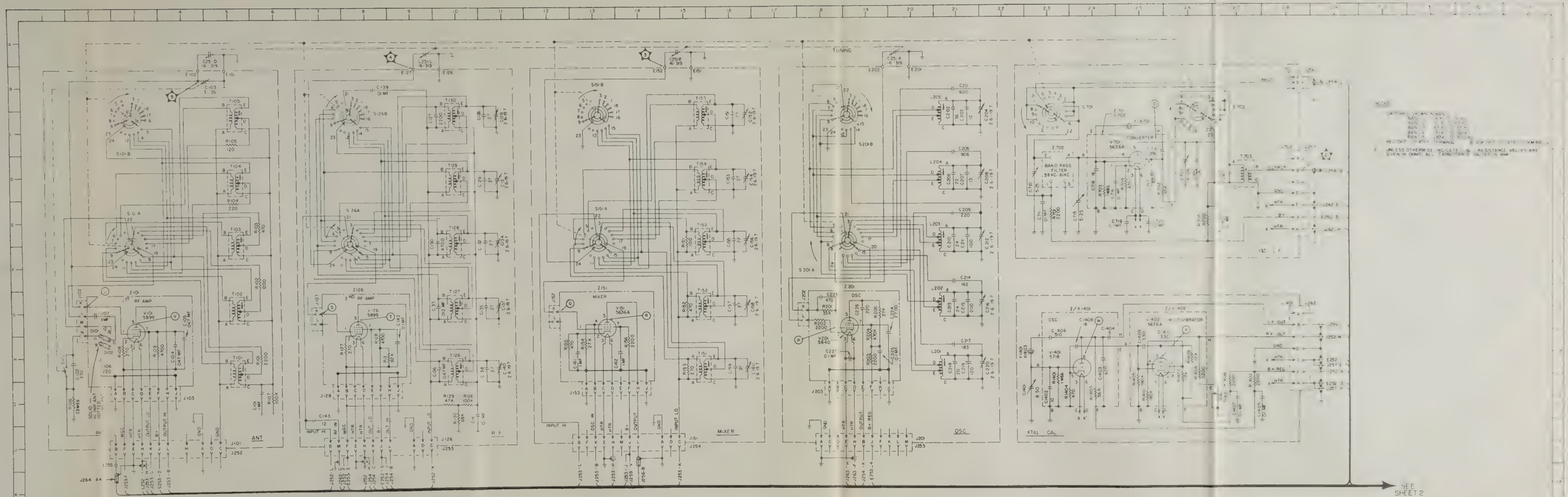


Figure 6-30. Radio Receiving Set AN/SRR-11A Schematic Diagram (Sheet 2 of 3)

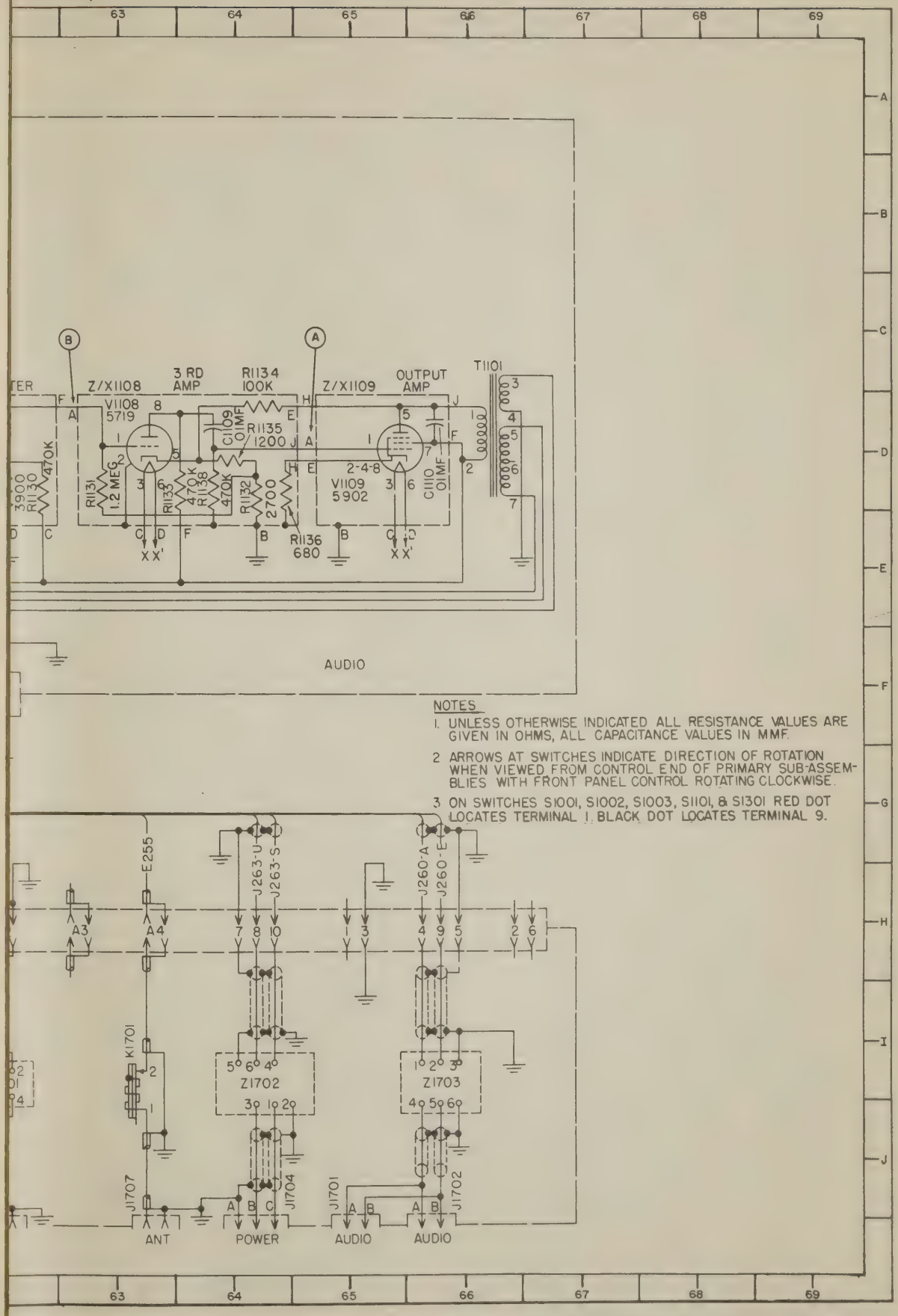


Figure 6–30. Radio Receiving Set AN/SRR–11A, Schematic Diagram (Sheet 3 of 3)

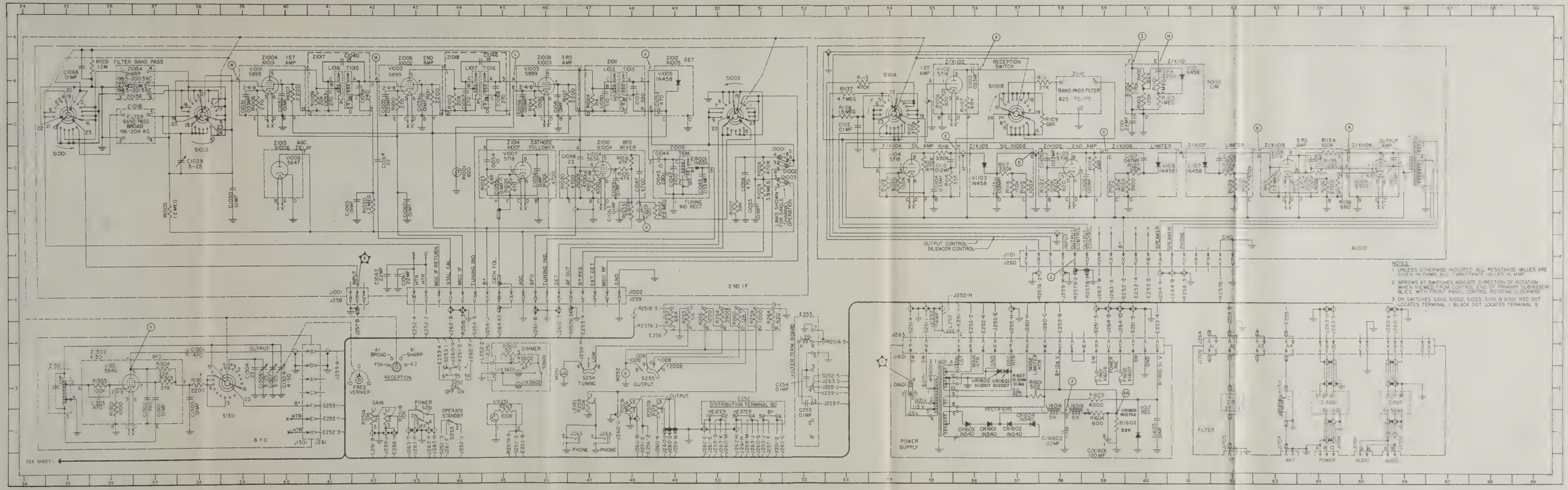
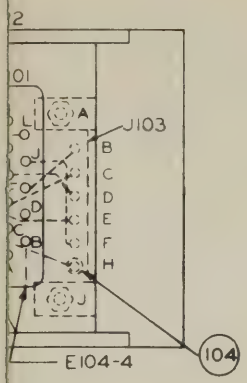
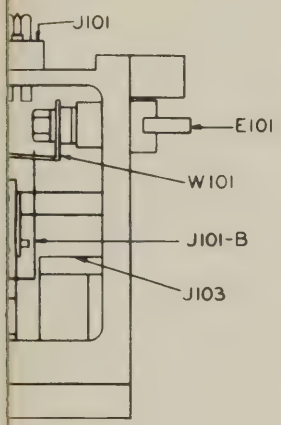


Figure 6-30. Radio Receiving Set AN/SRR-11A, Schematic Diagram (Sheet 3 of 3)



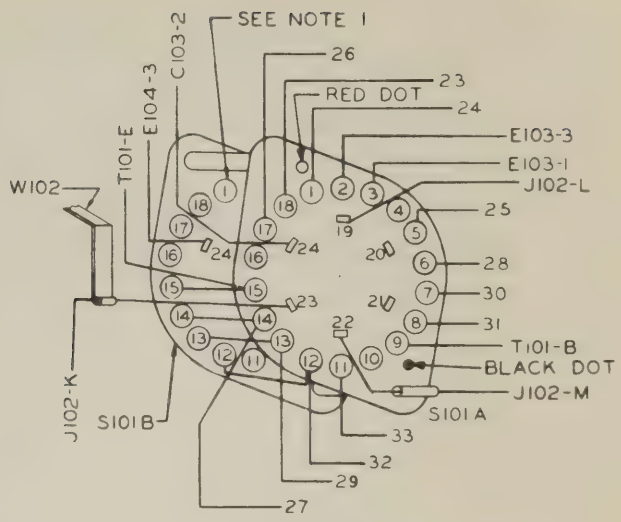
104-6



S

TCH

8
24-S101A-1
01A-5
-17
27-S101A-14
-6
29-S101A-13
-7
31-S101A-8
32-S101A-12
33-S101A-11
E104-1

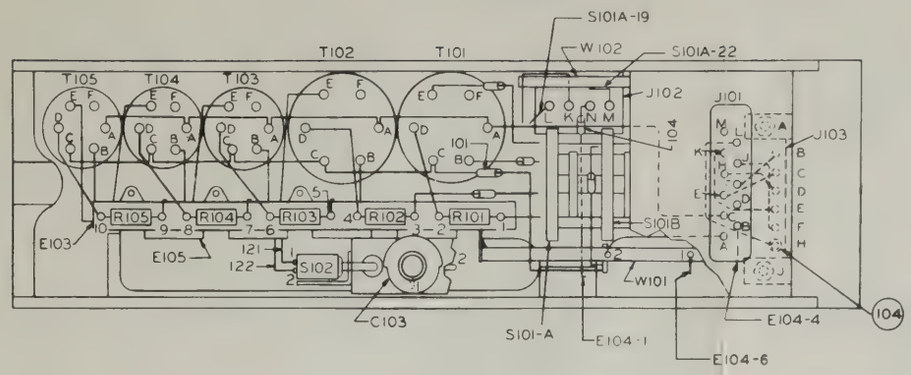


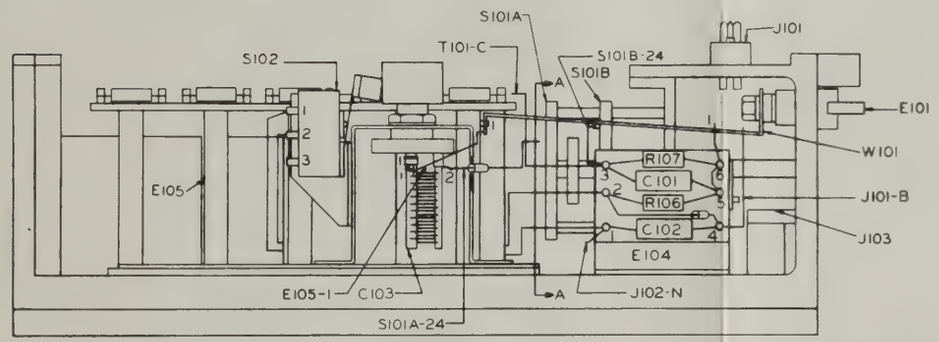
VIEW AT "A-A"
USE IN CONJUNCTION
WITH DETIAIL OF HARNESS

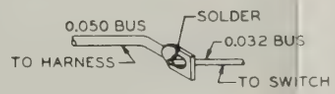
NOTE

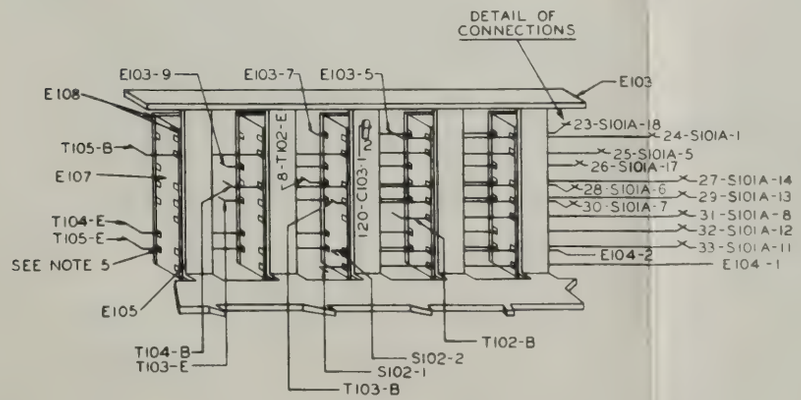
1. BEND TERMINALS OF S101B WHICH INTERFERE WITH E104.

Figure 6-31. Antenna Preamplifier, Wiring Diagram

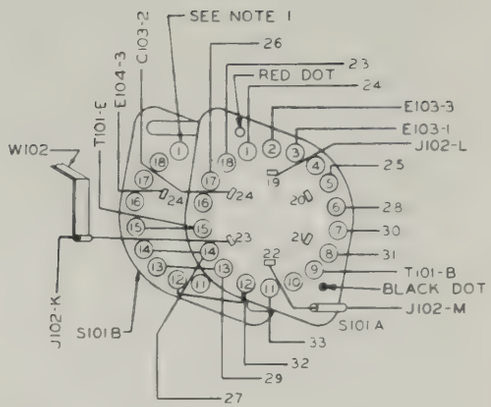








DETAIL OF HARNESS

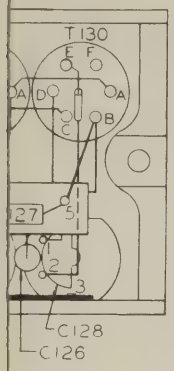


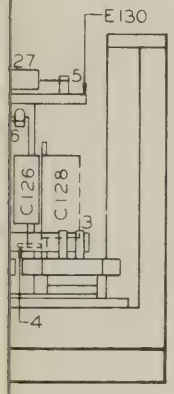
VIEW AT 'A-A
USE IN CONJUNCTION
WITH DETIAIL OF HARNESS

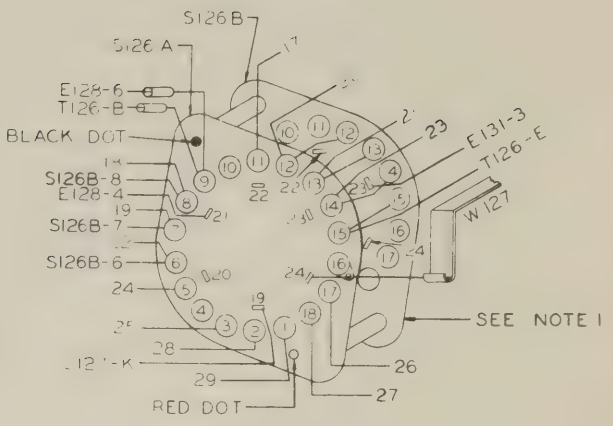
NOTE

1. BEND TERMINALS OF S101B WHICH INTERFERE WITH E104

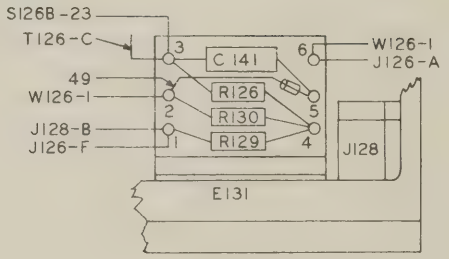
Figure 6-31. Antenna Preamplifier, Wiring Diagram







VIEW AT "A-A"
USE IN CONJUNCTION WITH
DETAIL OF HARNESS



VIEW AT "B-B"
ROTATED 180°

NOTES
1. BEND TERMINALS OF S126B THAT INTERFERE WITH E128 AND E131.

E130

C128-1

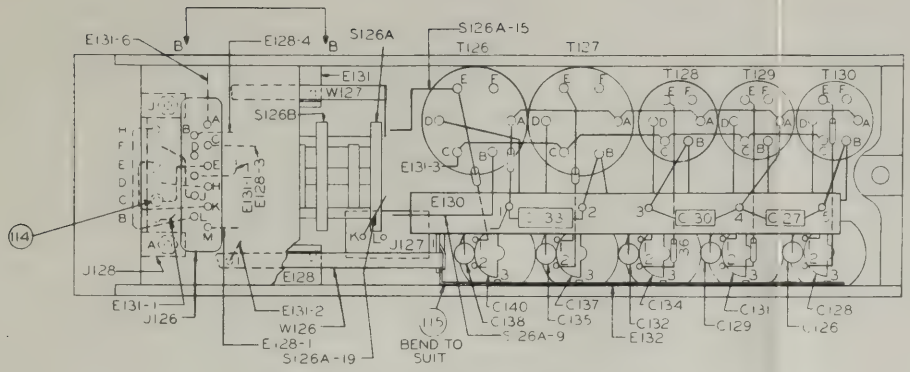
E-133

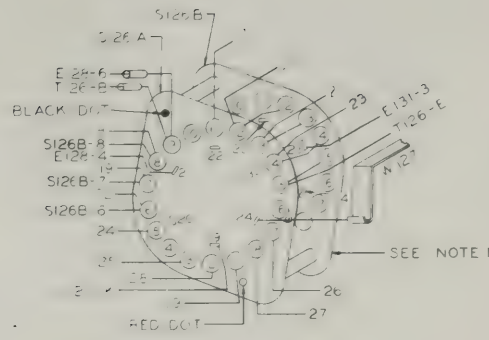
T130-B

T130-D

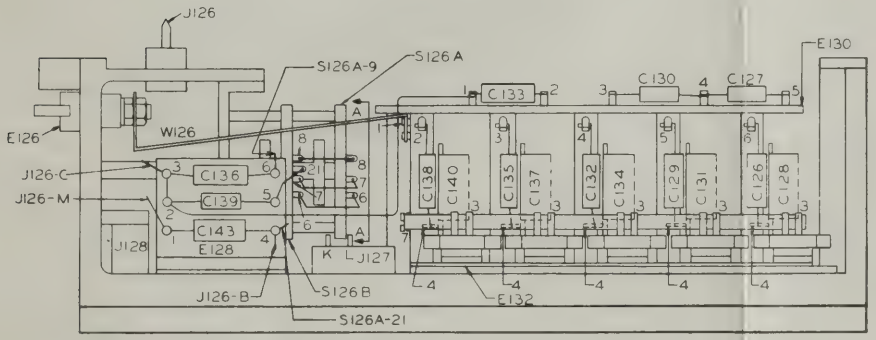
E134

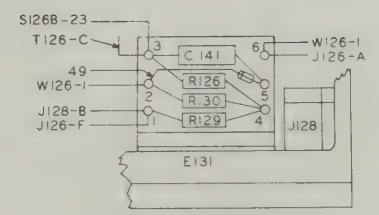
Figure 6–32. R-F Amplifier, Wiring Diagram





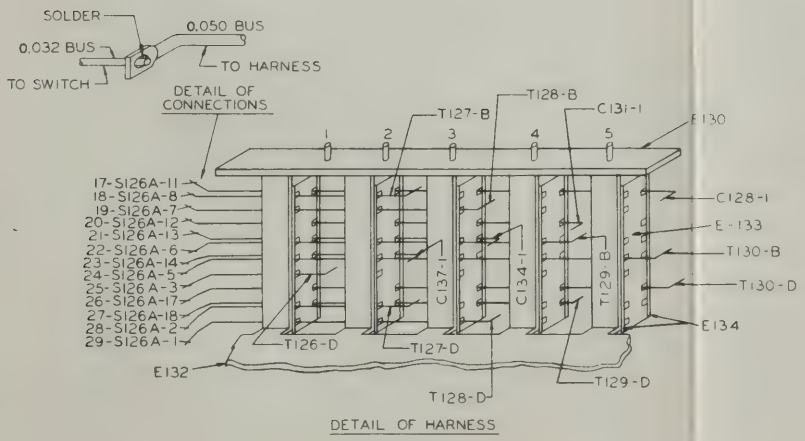
VIEW AT "A-A"
USE IN CONJUNCTION WITH
DETAIL OF HARNESS





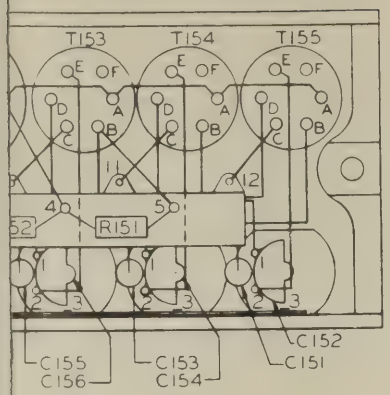
VIEW AT "B-B"
ROTATED 180°

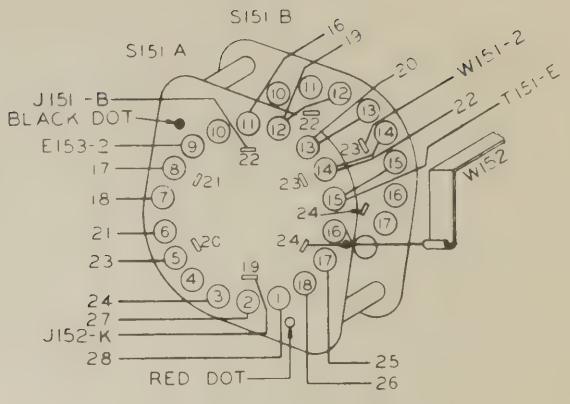
NOTES
1. BEND TERMINALS OF S126B THAT INTERFERE WITH E128 AND E131.



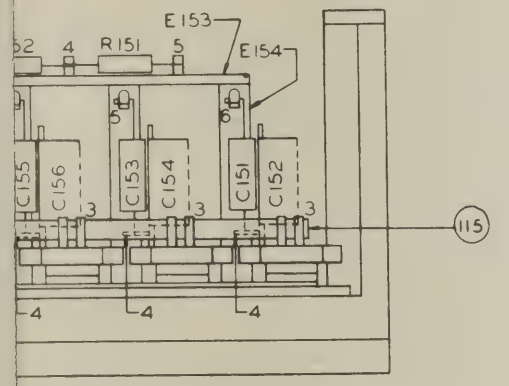
DETAIL OF HARNESS

Figure 6-32. R-F Amplifier, Wiring Diagram





VIEW AT "A-A"
USE IN CONJUNCTION WITH
DETAIL OF HARNESS.



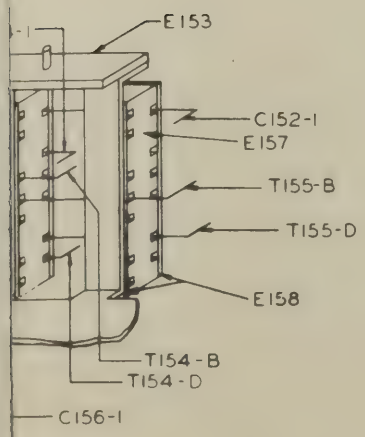
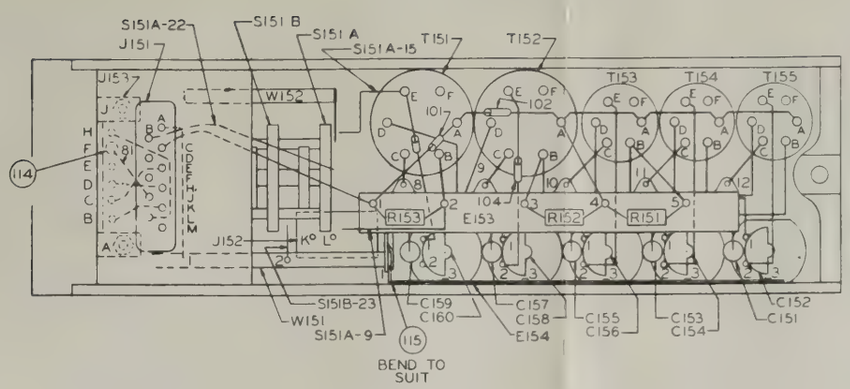
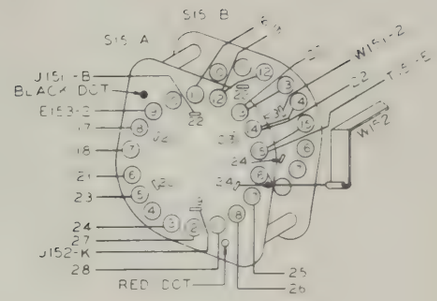
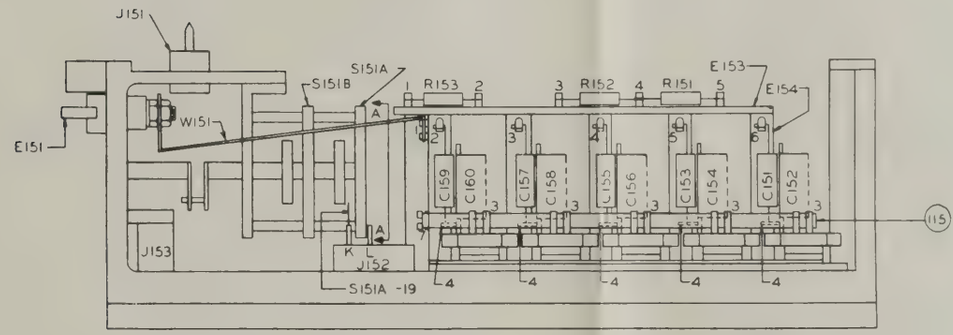


Figure 6-33. Mixer, Wiring Diagram

AL







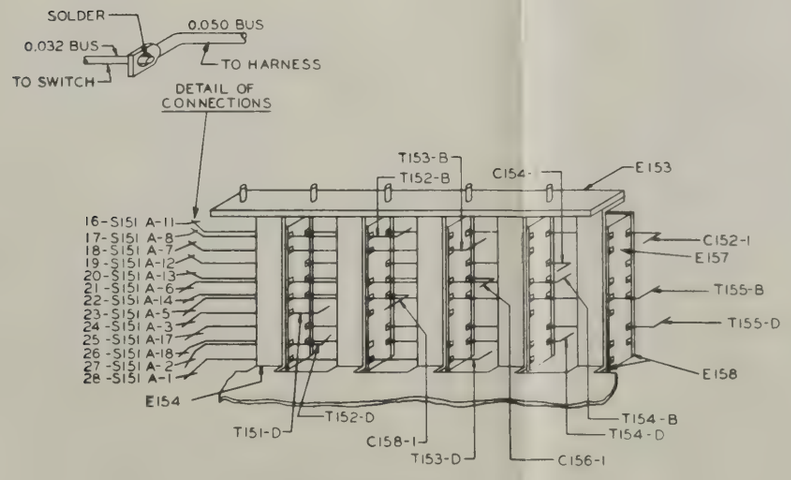


Figure 6-33. Mixer, Wiring Diagram

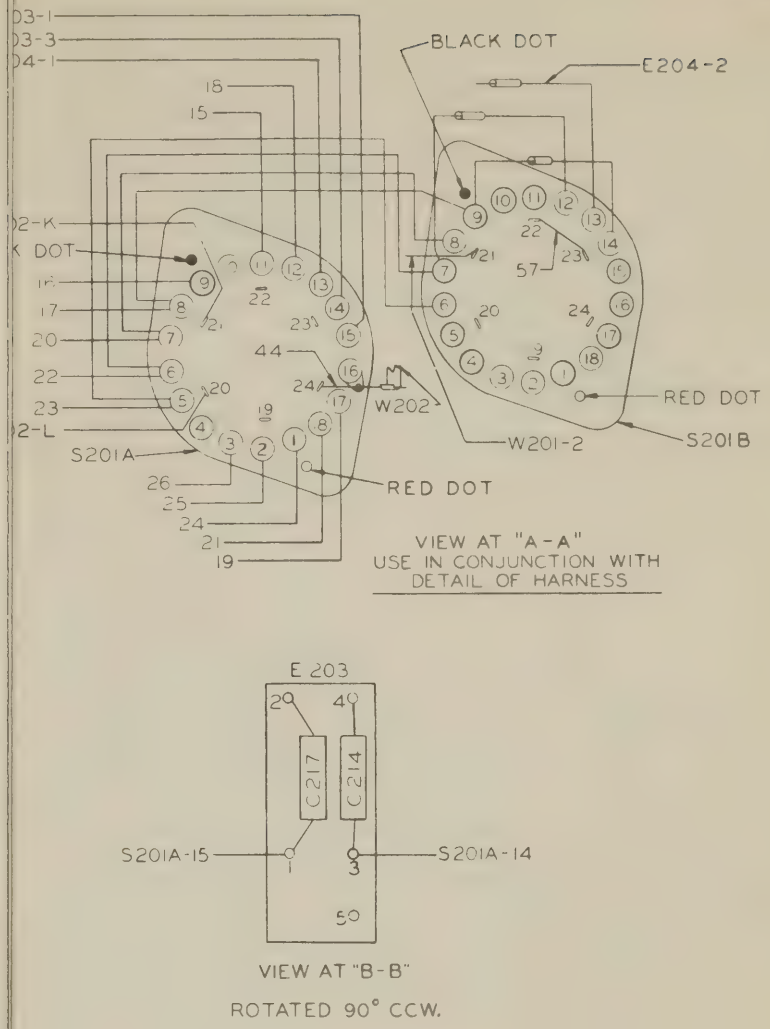
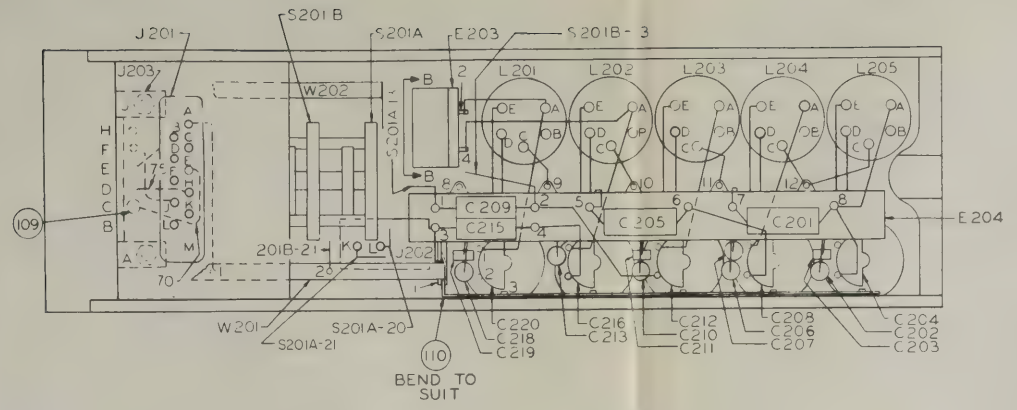
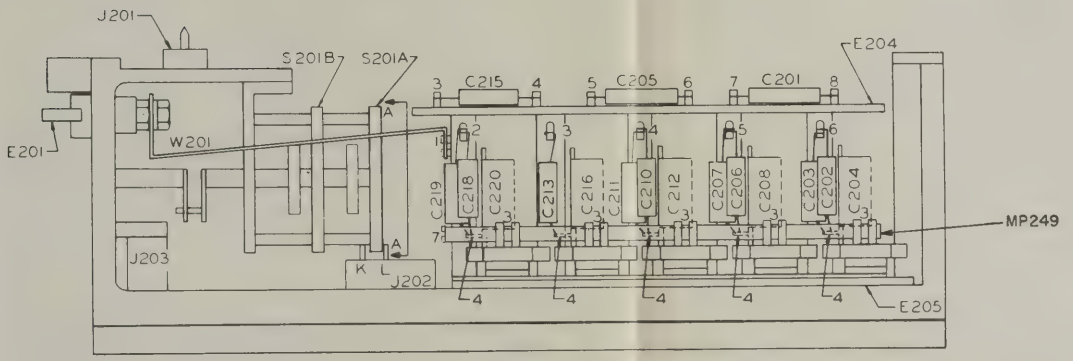
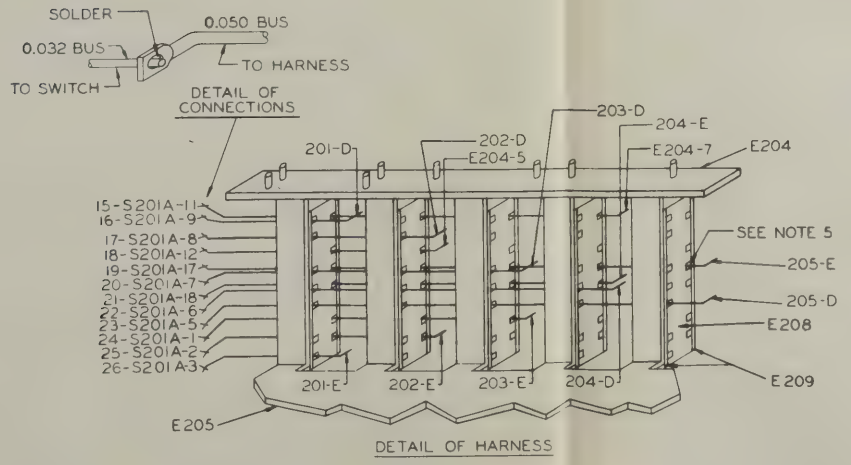
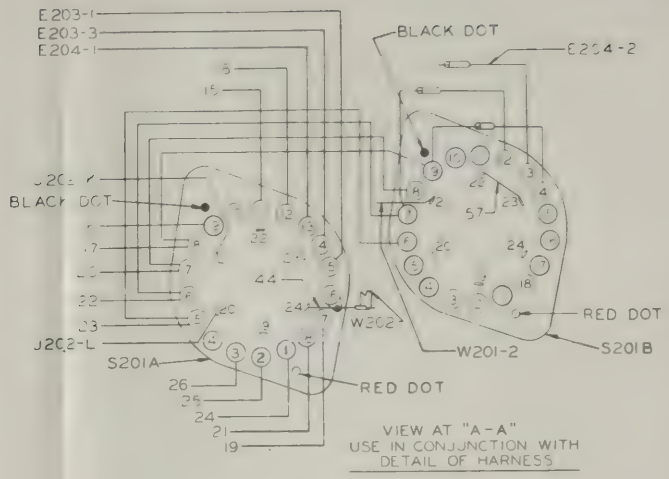


Figure 6–34. Oscillator, Wiring Diagram









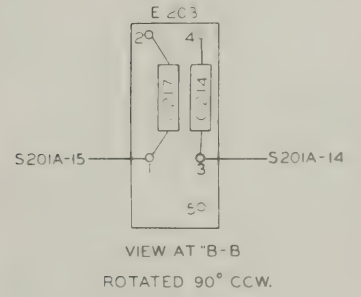
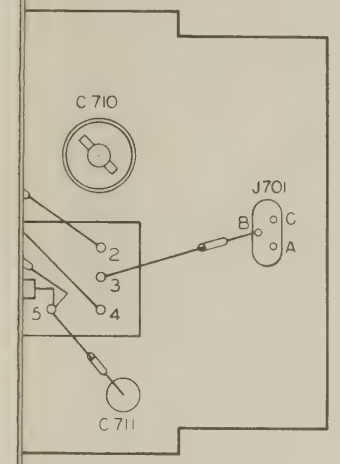
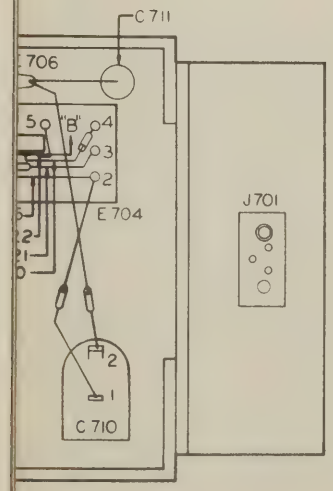


Figure 6-34. Oscillator, Wiring Diagram





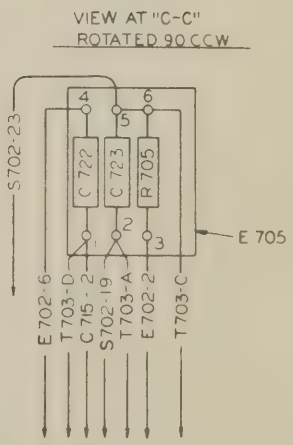
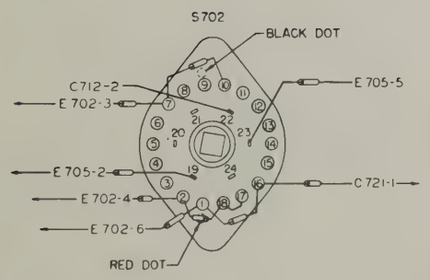
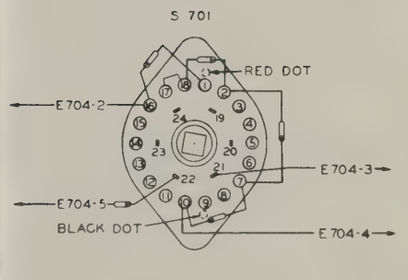


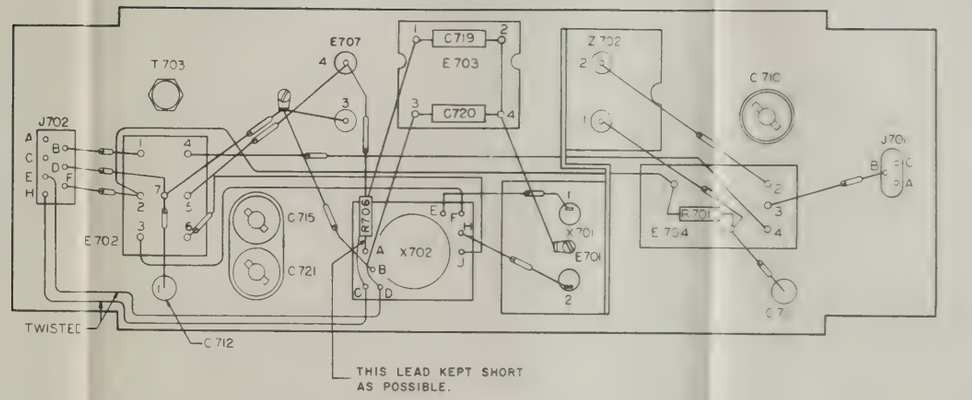
Figure 6–35. First I-F Amplifier, Wiring Diagram

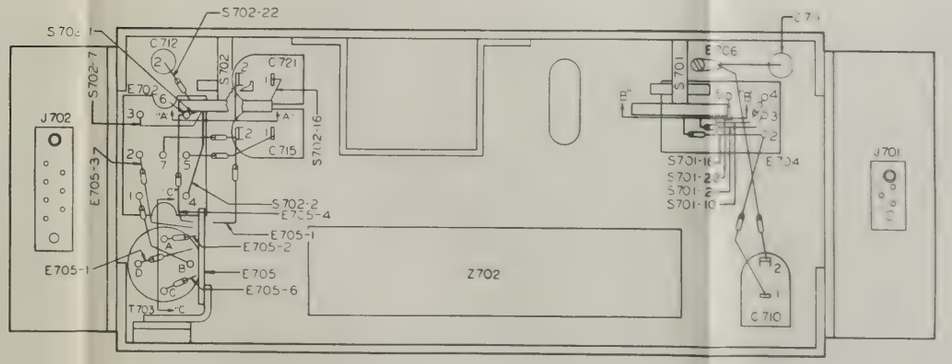


VIEW AT "A-A"



VIEW AT "B-B"





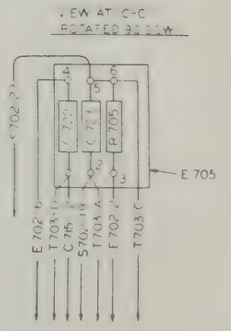
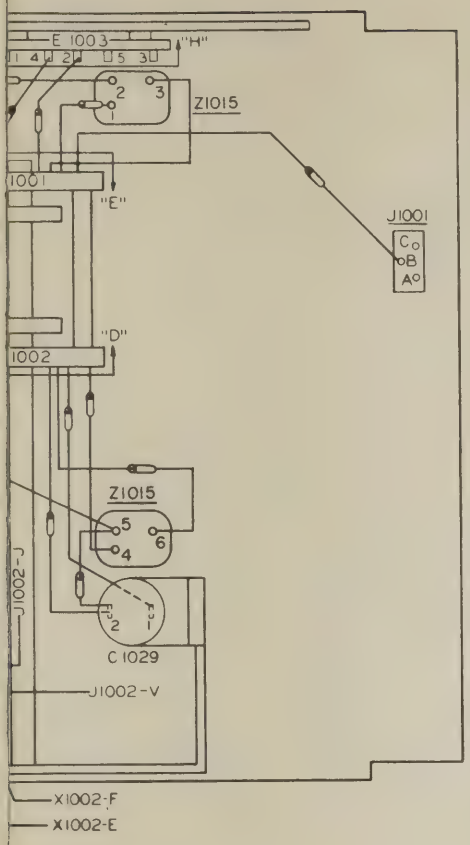
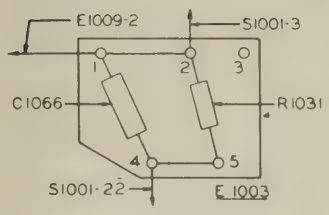
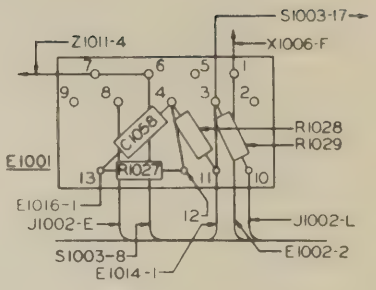


Figure 6-35. First I-F Amplifier, Wiring Diagram

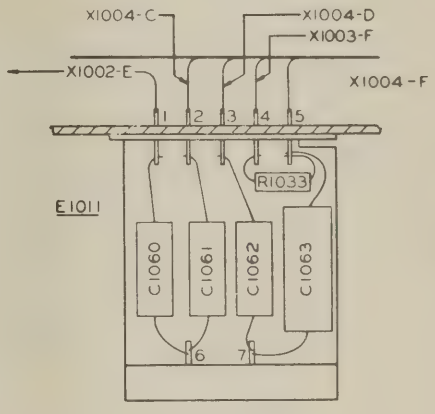




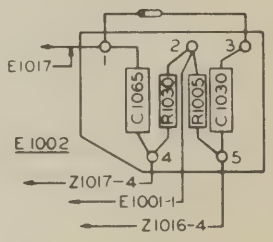
VIEW AT "H-H"



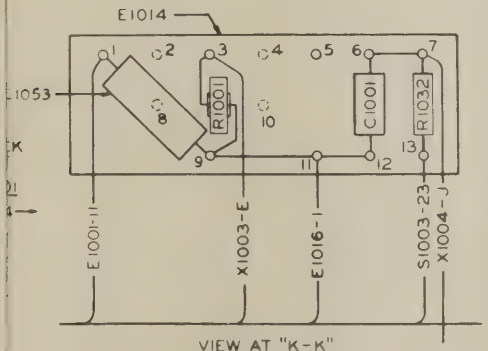
VIEW AT "B-B"
ROTATED 90° CCW



VIEW AT "F-F"
ROTATED 90° CW



VIEW AT "C-C"
ROTATED 90° CW



VIEW AT "K-K"
ROTATED 180°

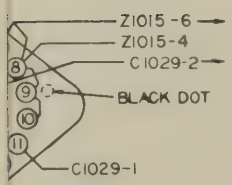


Figure 6-36. Second I-F Amplifier, Wiring Diagram

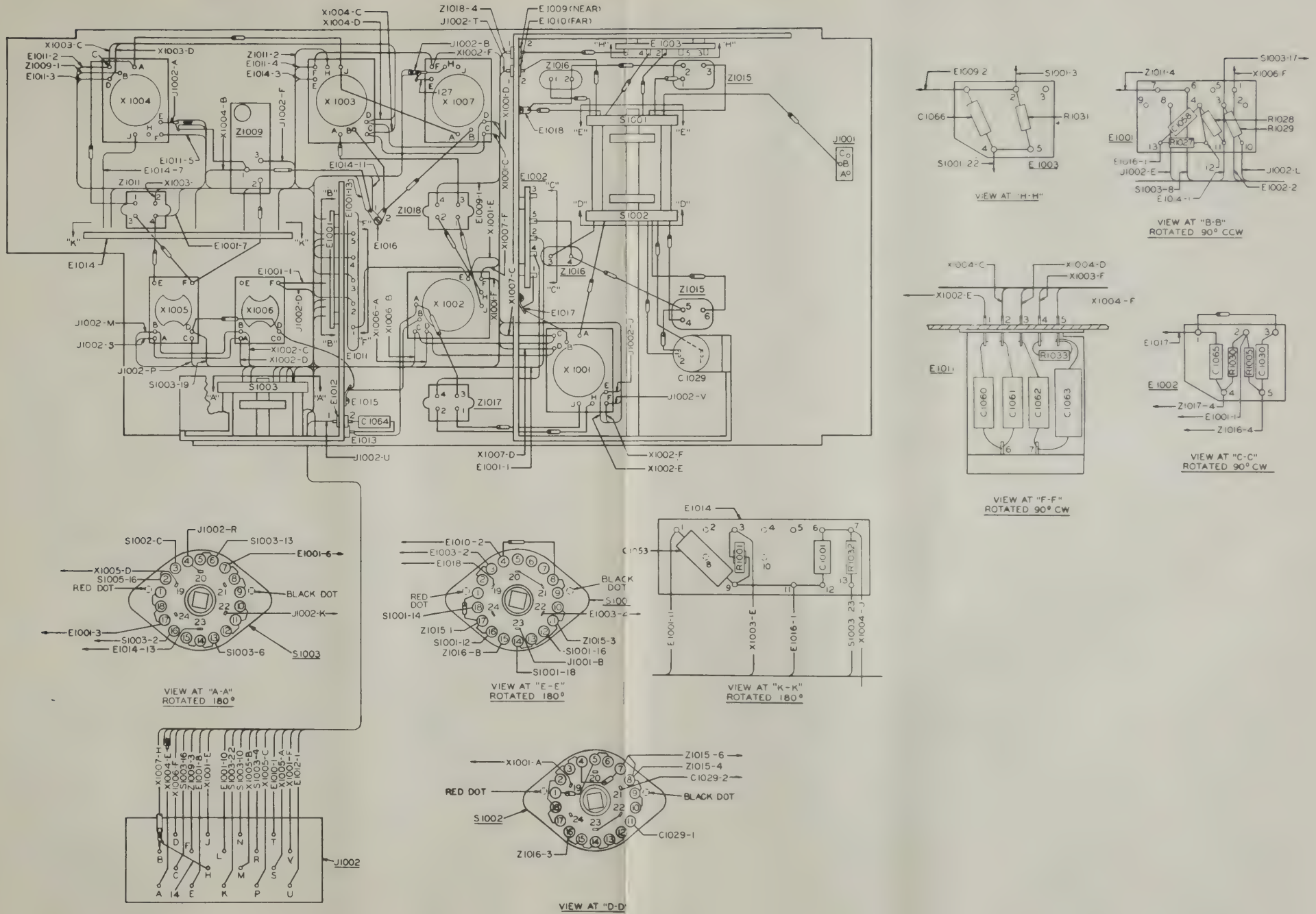


Figure 6-36. Second I-F Amplifier, Wiring Diagram

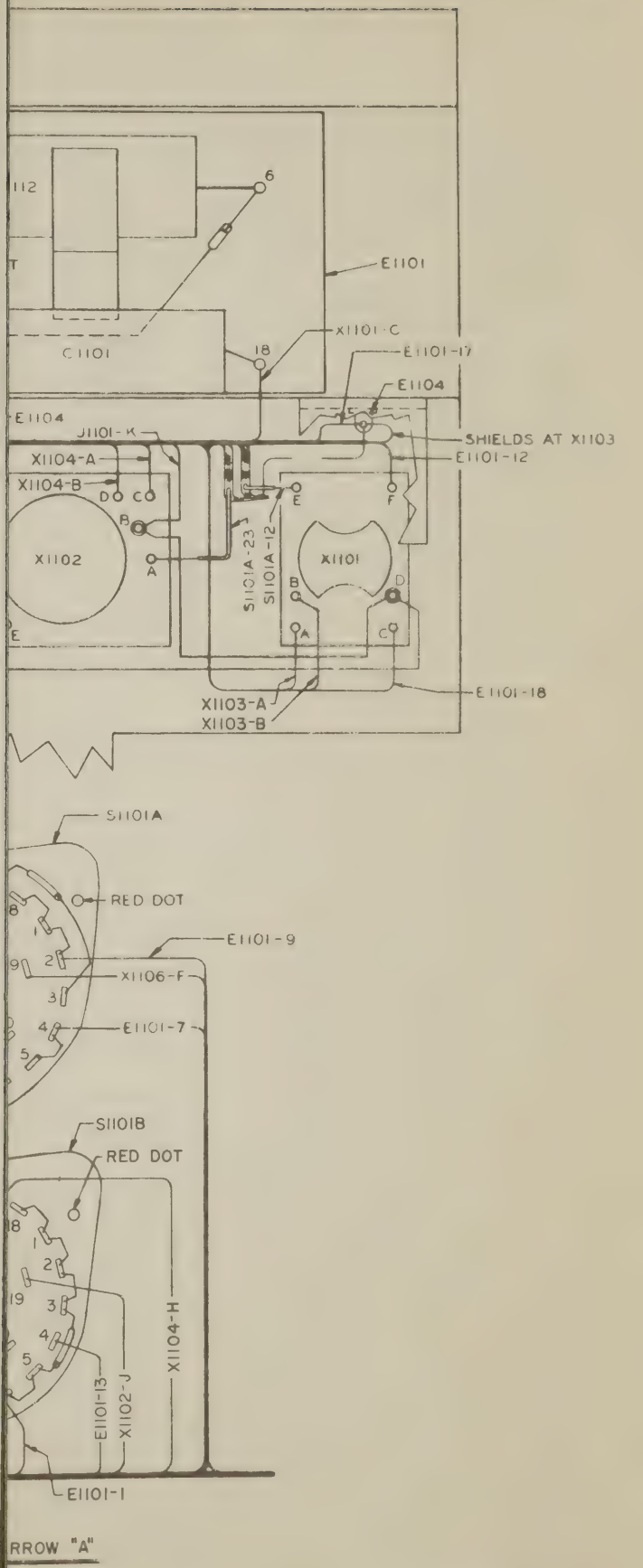


Figure 6–37. Audio Amplifier, Wiring Diagram

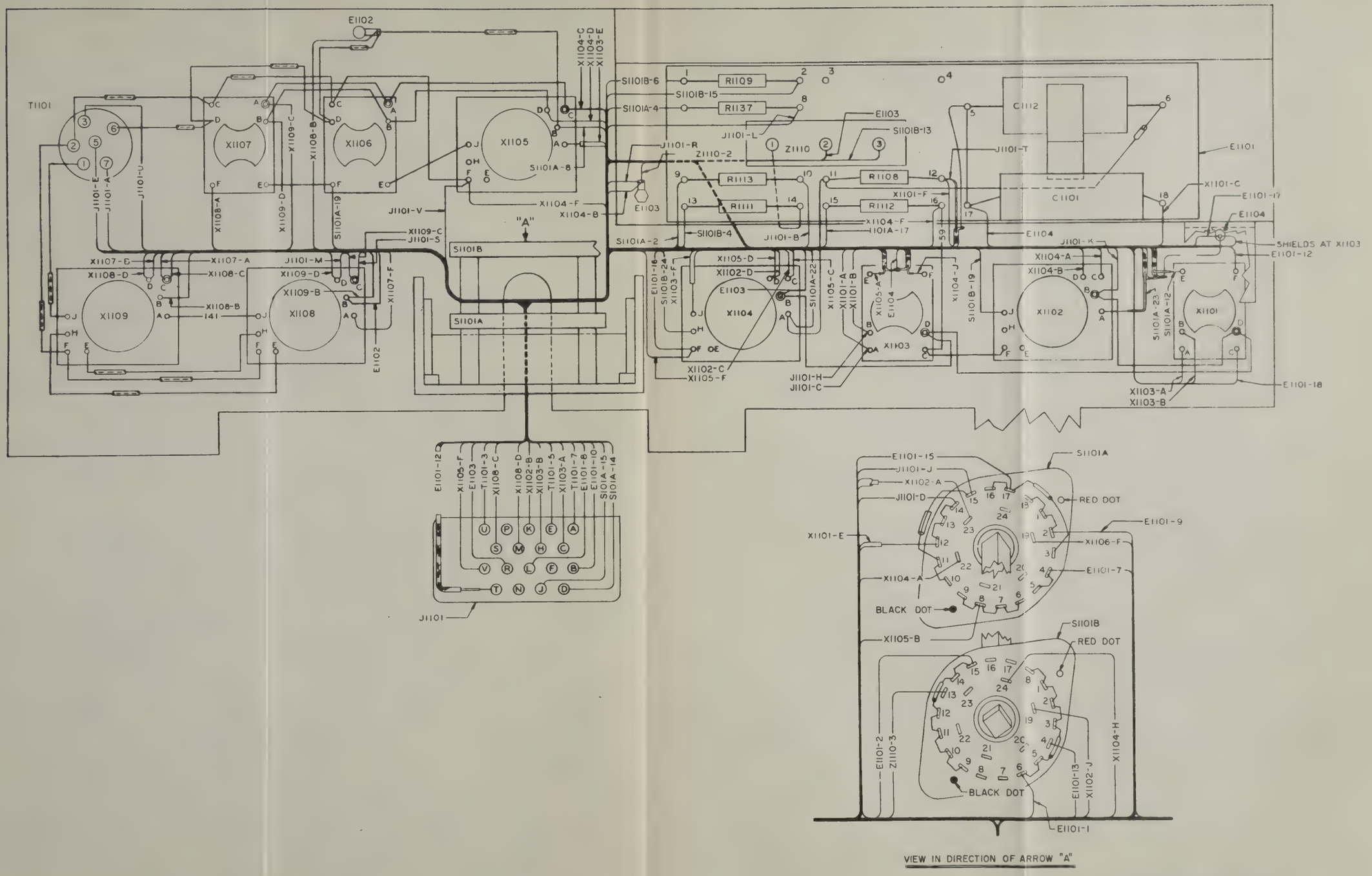


Figure 6-37. Audio Amplifier, Wiring Diagram

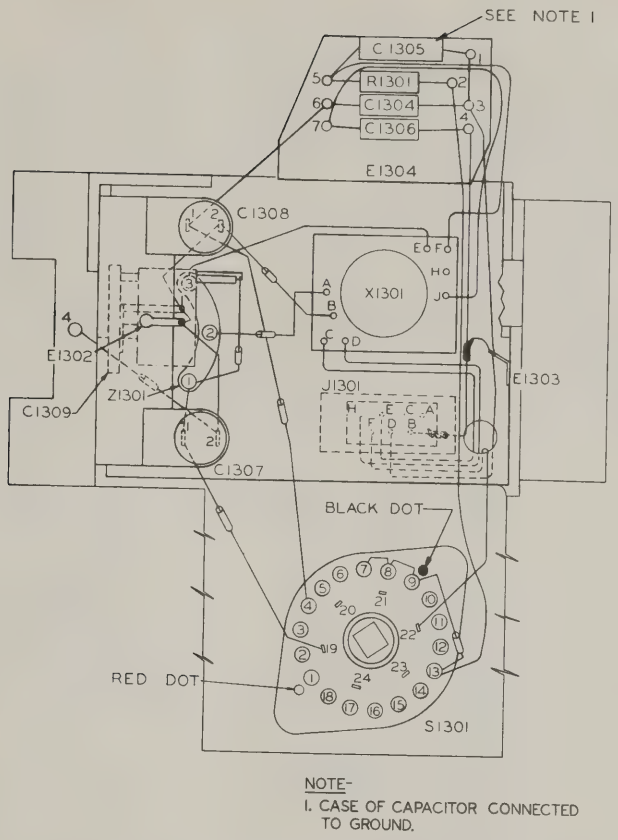


Figure 6-38. Beat Frequency Oscillator, Wiring Diagram

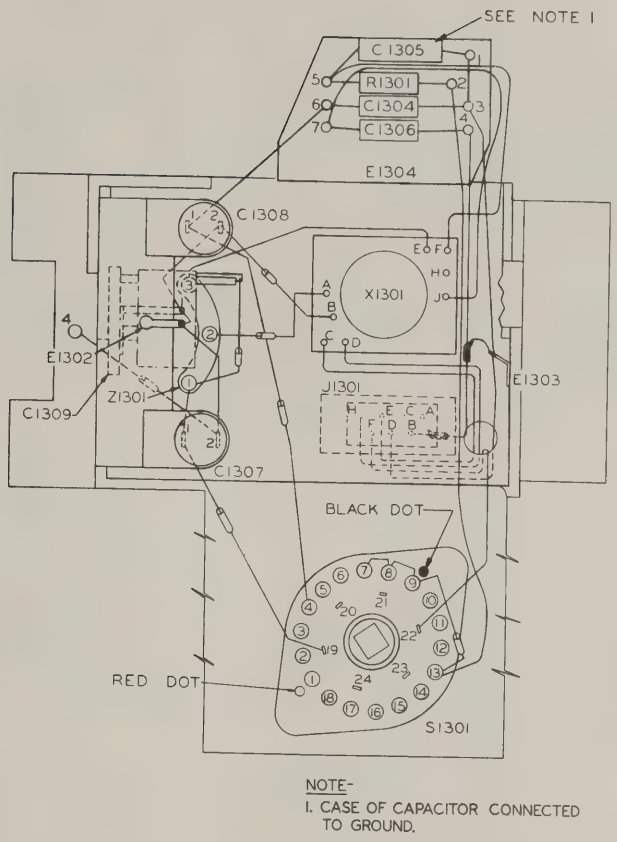


Figure 6-38. Beat Frequency Oscillator, Wiring Diagram

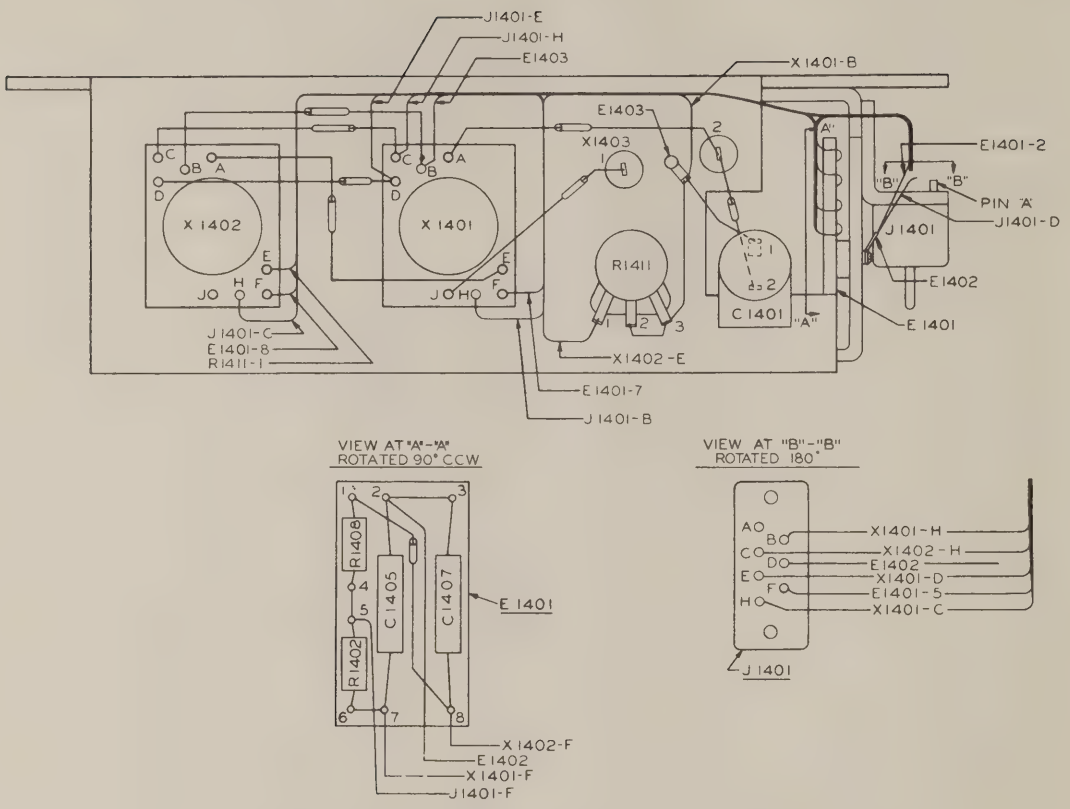


Figure 6–39. Crystal Calibrator, Wiring Diagram

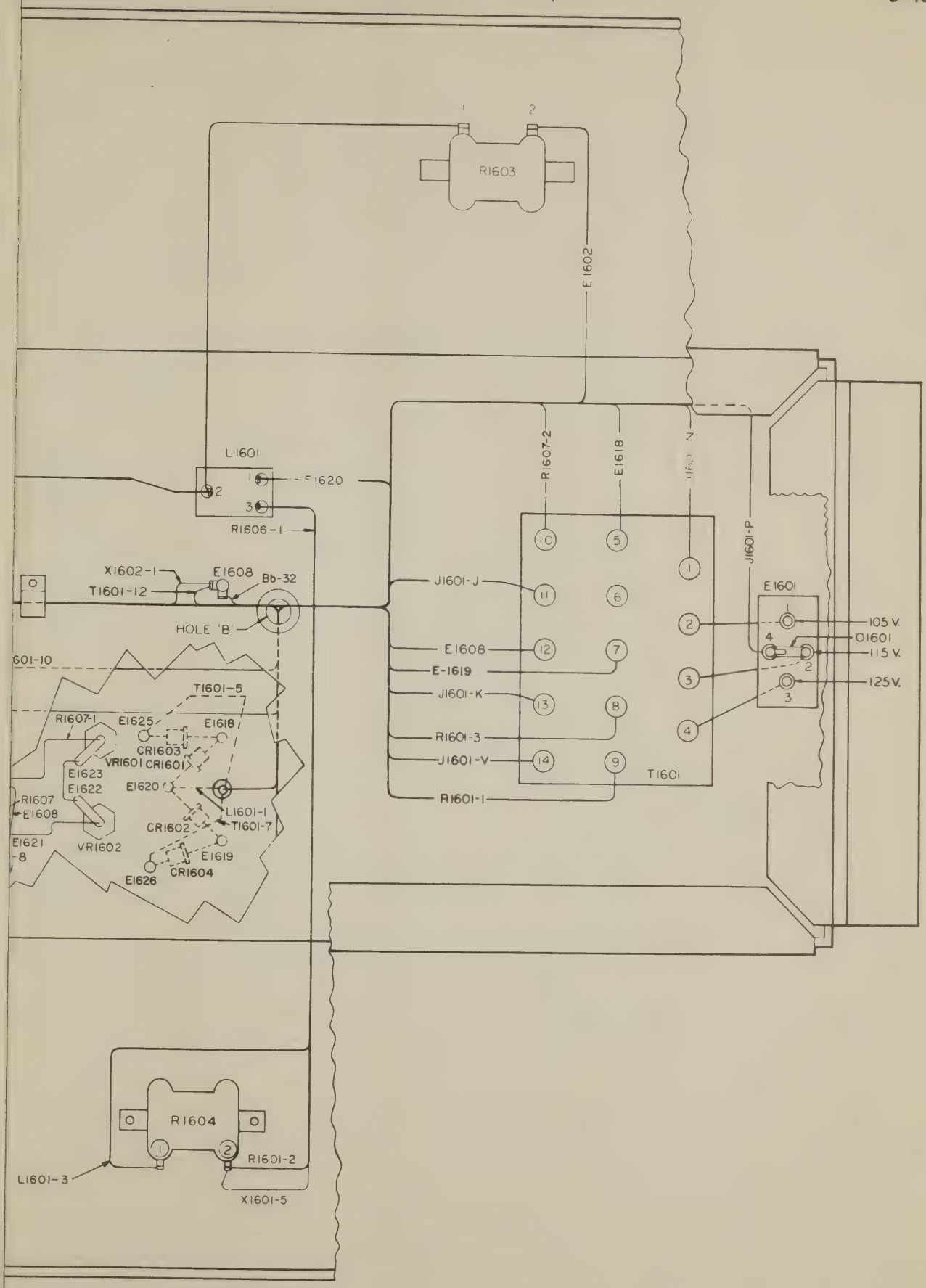


Figure 6-40. Power Supply, Wiring Diagram

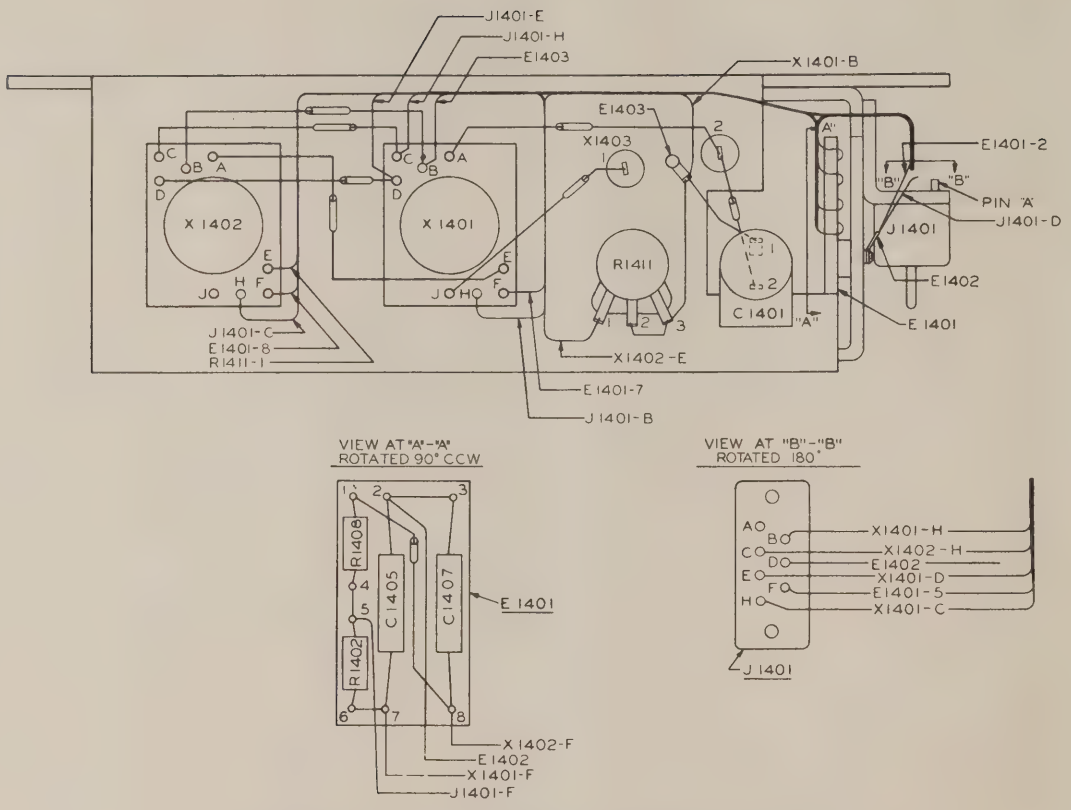


Figure 6–39. Crystal Calibrator, Wiring Diagram

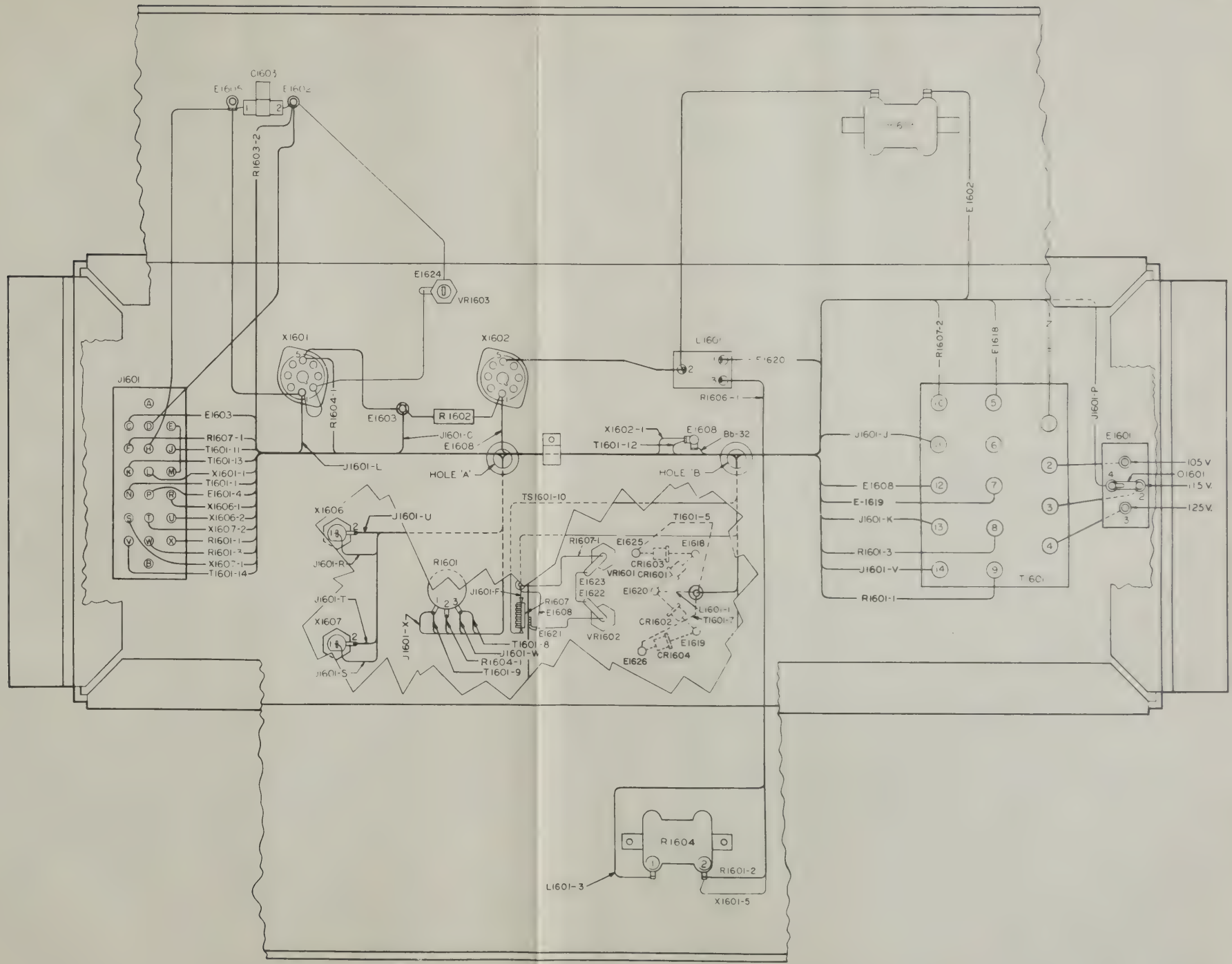
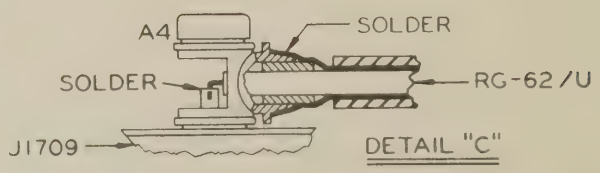


Figure 6-40. Power Supply, Wiring Diagram



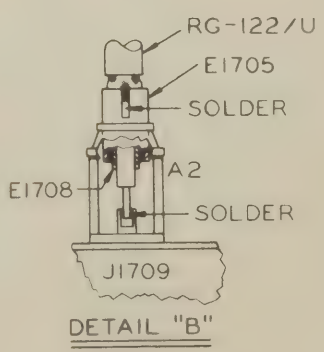
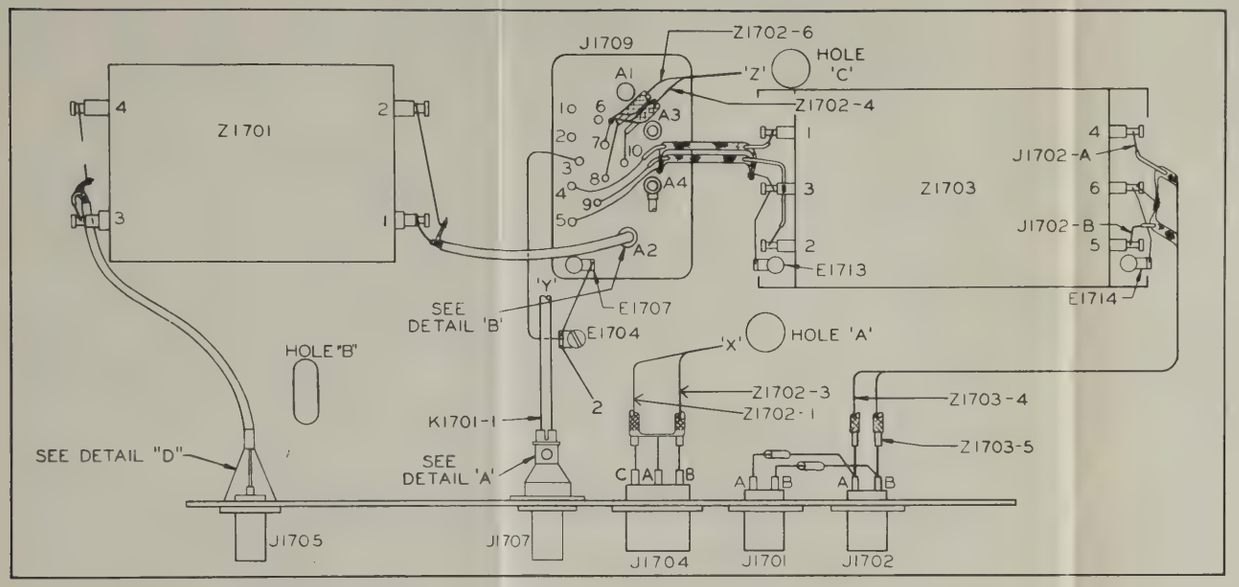
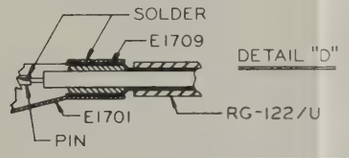
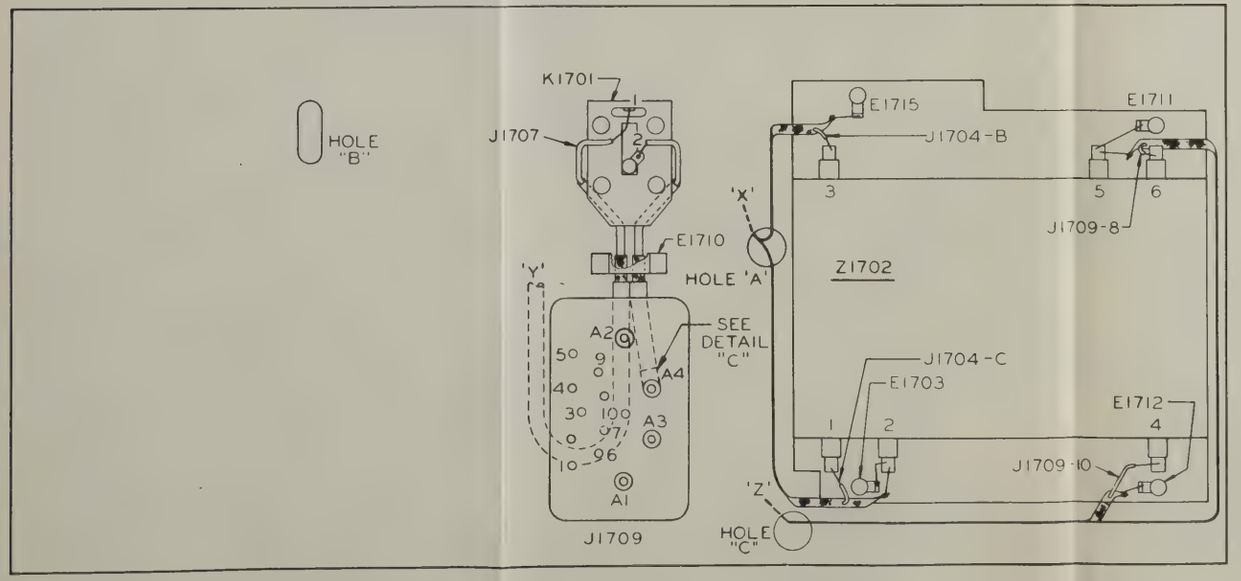
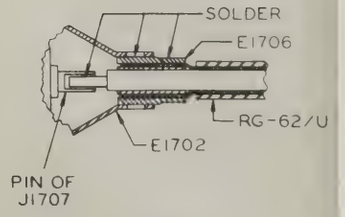


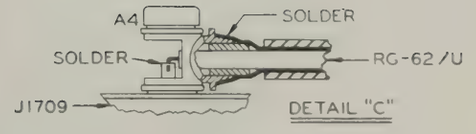
Figure 6–41. Filter Assembly, Wiring Diagram











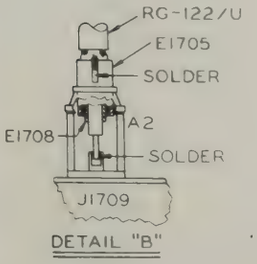
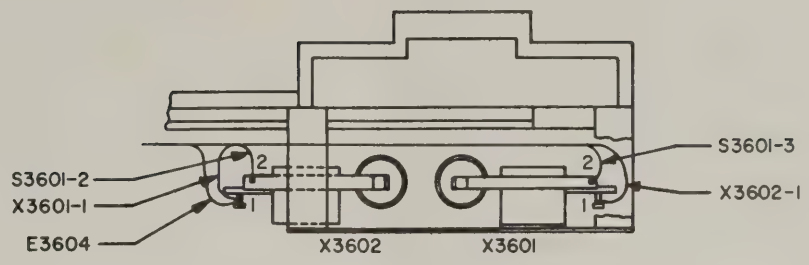
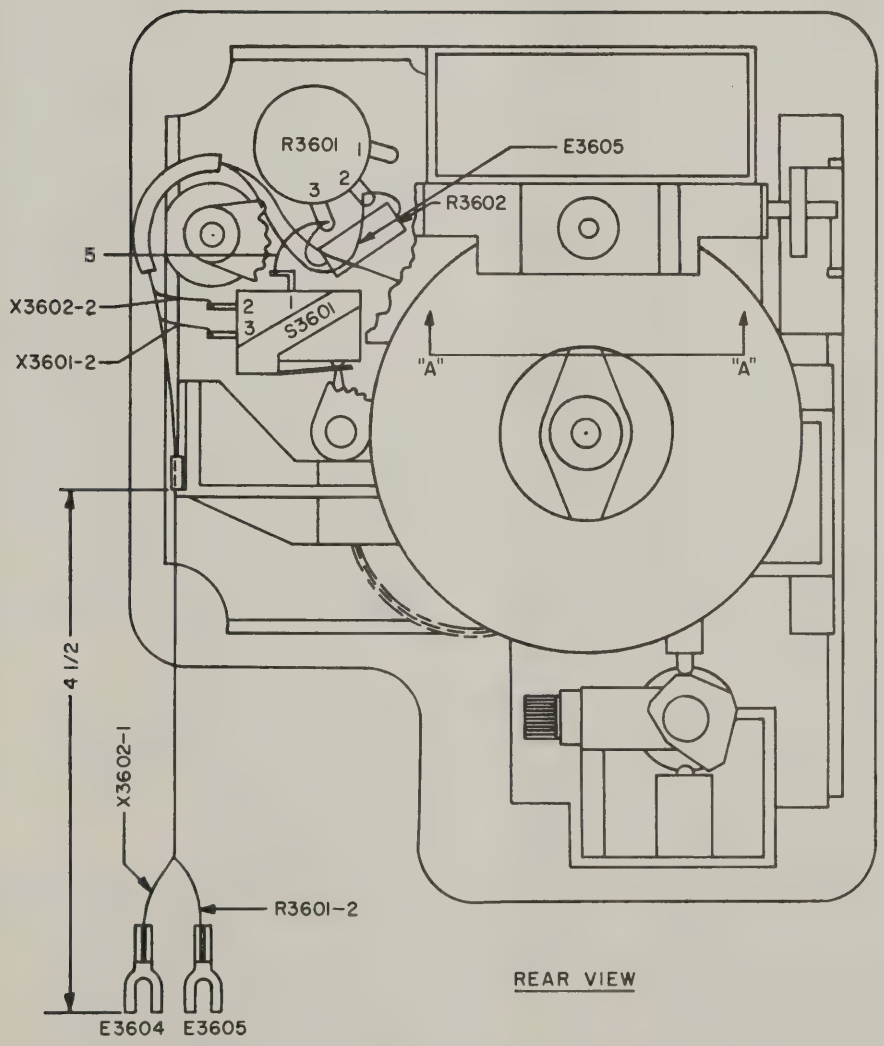


Figure 6-41. Filter Assembly, Wiring Diagram

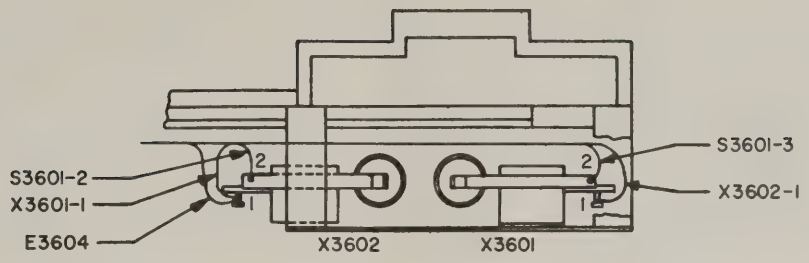


SECTION "A-A"

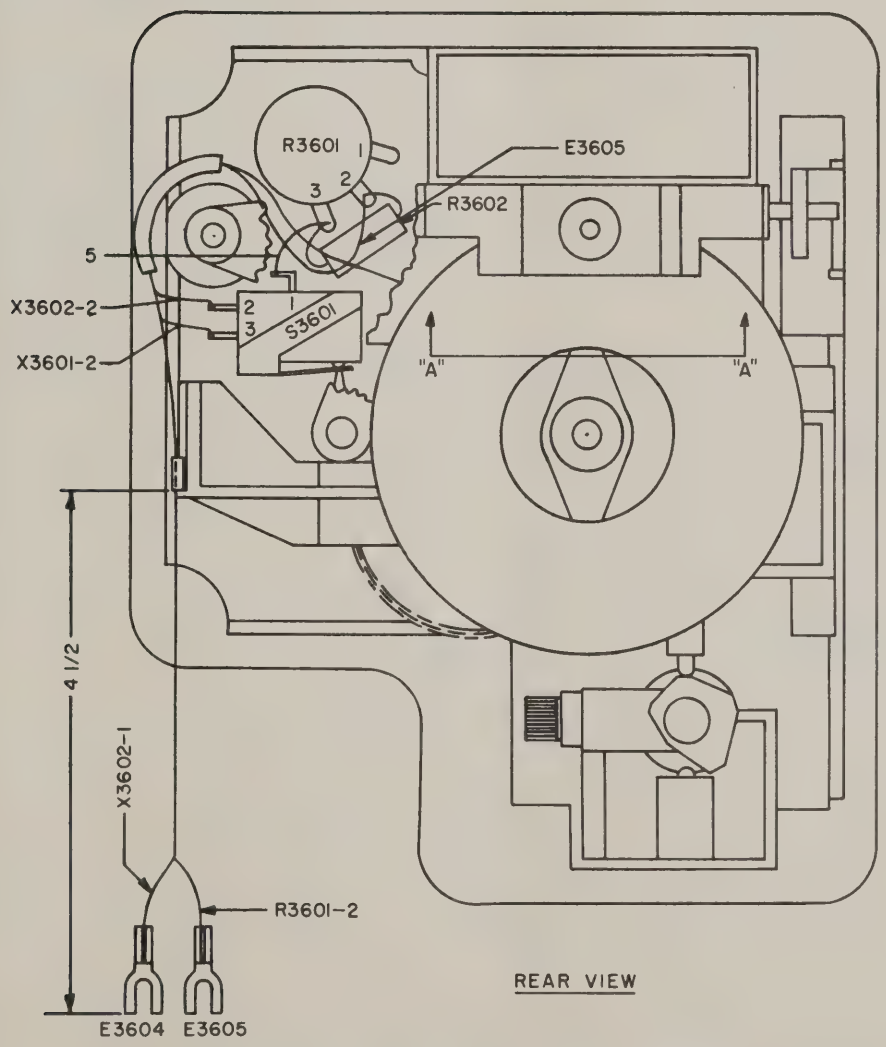


REAR VIEW

Figure 6-42. Dial Assembly, Wiring Diagram



SECTION "A-A"



REAR VIEW

Figure 6-42. Dial Assembly, Wiring Diagram

(b) Adjust horizontal adjustment screws so that upper of two short horizontal lines is about 1/32 inch below top of window.

(i) To focus image, adjust projection lens by loosening two focus adjustment set screws on lens assembly and moving lens by hand until image is in focus. Tighten two focus adjustment set screws.

(j) Rotate tuning knob until zeros of each scale on tuning dial coincide.

(2) RECEPTION SWITCHES.—The segments of three wafer switches in the second i-f, two in the audio assembly, and one in the BFO are rotated when the RECEPTION switch is rotated. If these switches are not properly aligned, the proper circuits required for a particular mode will not be utilized.

If normal rotation of wafer segment is counterclockwise (with rotating section of wafer switch facing the front panel) when RECEPTION control is rotated clockwise, proceed as follows:

(a) Set RECEPTION switch in A1 BROAD position.

(b) Loosen Allen-screw that holds switch arm to shaft.

(c) Turn shaft until red dot on rotor is lined up with red dot on switch stator.

(d) Move switch shaft one position counterclockwise (with rotor section of wafer switch facing front panel).

(e) Tighten Allen screw.

If normal rotation of wafer switch segment is clockwise (with rotating section of wafer switch facing front panel) when RECEPTION switch is rotated clockwise, proceed as follows:

(a) Set RECEPTION switch in A1 BROAD position.

(b) Loosen Allen screw that holds switch arm to shaft.

(c) Turn shaft until black dot on rotor is lined up with black dot on switch stator.

(d) Turn switch shaft one position clockwise (with rotor section of wafer switch facing front panel).

(e) Tighten Allen screw.

(3) BAND SELECTOR SWITCHES.—The band selector switch controls wafer switches in the antenna, r-f, mixer, oscillator, and first i-f subassembly by mechanical movement of the operate bar. The operate bar moves the switch arm of each switch assembly to obtain the desired switching. Each switch has six detent positions, the last four of which are used. Align these switches as follows:

(a) Remove subassembly in which misalignment occurs.

(b) For antenna, r-f, mixer, or oscillator subassemblies, set switch to extreme clockwise position; for first i-f subassembly, set switch to extreme counterclockwise position.

(c) Turn switch back two positions.

(d) Loosen Allen screw on switch arm.

(e) Set switch arm in vertical position and tighten Allen screw.

(f) Set band switch in 63–133 kc position.

(g) Insert subassembly in chassis.

(h) Engage switch arm and operate bar.

c. STANDARDS.—All replacement parts should be identical to the parts they are replacing. If exact replacement parts are not available, a substitute may be used if it meets with all the requirements listed in the parts list. For example, a replacement resistor should have the same resistance value, tolerance, power rating, temperature coefficient, and physical size.

Parts are replaced when they are physically damaged or are electrically defective. For example, a resistor is replaced when it is cracked, discolored, or its resistance is above the rated tolerance. A vacuum tube is replaced when it does not give the proper readings on a tube tester.

Figure 6–5 shows selectivity curves for all bands of the receiver, measured in the A1 BROAD reception position.

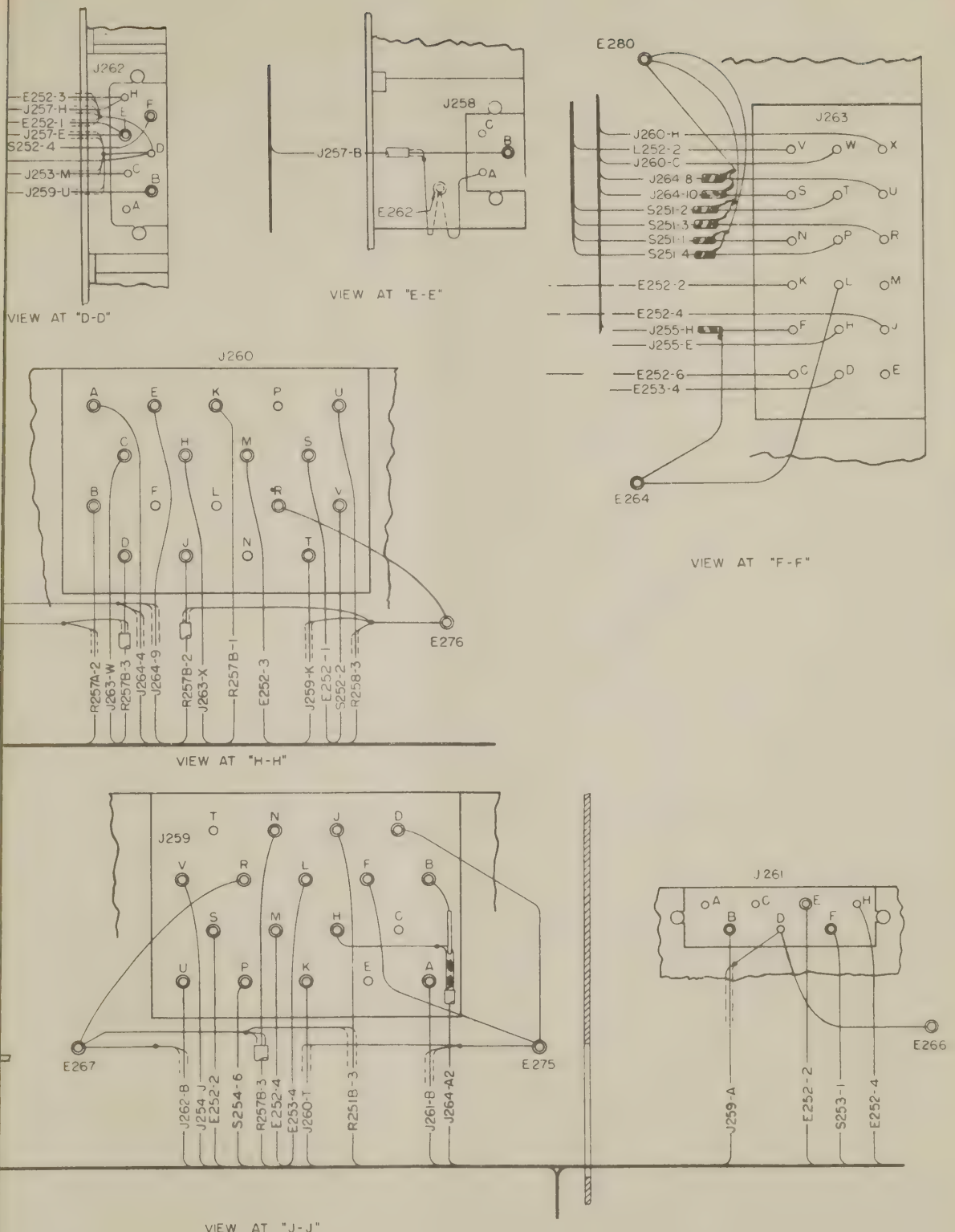


Figure 6–43. Main Frame Assembly, Wiring Diagram

(b) Adjust horizontal adjustment screws so that upper of two short horizontal lines is about 1/32 inch below top of window.

(i) To focus image, adjust projection lens by loosening two focus adjustment set screws on lens assembly and moving lens by hand until image is in focus. Tighten two focus adjustment set screws.

(j) Rotate tuning knob until zeros of each scale on tuning dial coincide.

(2) RECEPTION SWITCHES.—The segments of three wafer switches in the second i-f, two in the audio assembly, and one in the BFO are rotated when the RECEPTION switch is rotated. If these switches are not properly aligned, the proper circuits required for a particular mode will not be utilized.

If normal rotation of wafer segment is counterclockwise (with rotating section of wafer switch facing the front panel) when RECEPTION control is rotated clockwise, proceed as follows:

(a) Set RECEPTION switch in A1 BROAD position.

(b) Loosen Allen-screw that holds switch arm to shaft.

(c) Turn shaft until red dot on rotor is lined up with red dot on switch stator.

(d) Move switch shaft one position counterclockwise (with rotor section of wafer switch facing front panel).

(e) Tighten Allen screw.

If normal rotation of wafer switch segment is clockwise (with rotating section of wafer switch facing front panel) when RECEPTION switch is rotated clockwise, proceed as follows:

(a) Set RECEPTION switch in A1 BROAD position.

(b) Loosen Allen screw that holds switch arm to shaft.

(c) Turn shaft until black dot on rotor is lined up with black dot on switch stator.

(d) Turn switch shaft one position clockwise (with rotor section of wafer switch facing front panel).

(e) Tighten Allen screw.

(3) BAND SELECTOR SWITCHES.—The band selector switch controls wafer switches in the antenna, r-f, mixer, oscillator, and first i-f subassembly by mechanical movement of the operate bar. The operate bar moves the switch arm of each switch assembly to obtain the desired switching. Each switch has six detent positions, the last four of which are used. Align these switches as follows:

(a) Remove subassembly in which misalignment occurs.

(b) For antenna, r-f, mixer, or oscillator subassemblies, set switch to extreme clockwise position; for first i-f subassembly, set switch to extreme counterclockwise position.

(c) Turn switch back two positions.

(d) Loosen Allen screw on switch arm.

(e) Set switch arm in vertical position and tighten Allen screw.

(f) Set band switch in 63–133 kc position.

(g) Insert subassembly in chassis.

(h) Engage switch arm and operate bar.

c. STANDARDS.—All replacement parts should be identical to the parts they are replacing. If exact replacement parts are not available, a substitute may be used if it meets with all the requirements listed in the parts list. For example, a replacement resistor should have the same resistance value, tolerance, power rating, temperature coefficient, and physical size.

Parts are replaced when they are physically damaged or are electrically defective. For example, a resistor is replaced when it is cracked, discolored, or its resistance is above the rated tolerance. A vacuum tube is replaced when it does not give the proper readings on a tube tester.

Figure 6–5 shows selectivity curves for all bands of the receiver, measured in the A1 BROAD reception position.

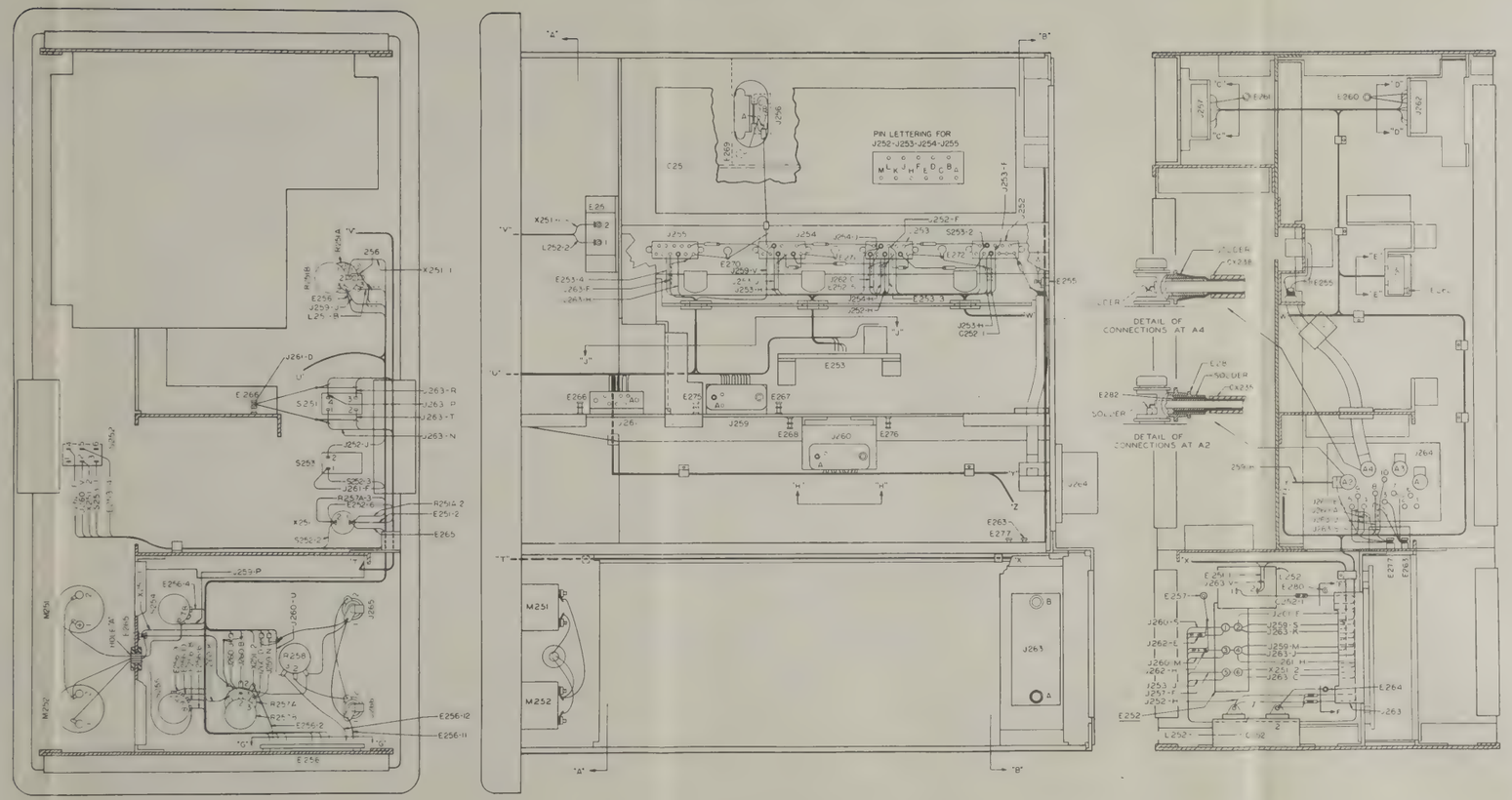


Figure 6-43. Main Frame Assembly, Wiring Diagram

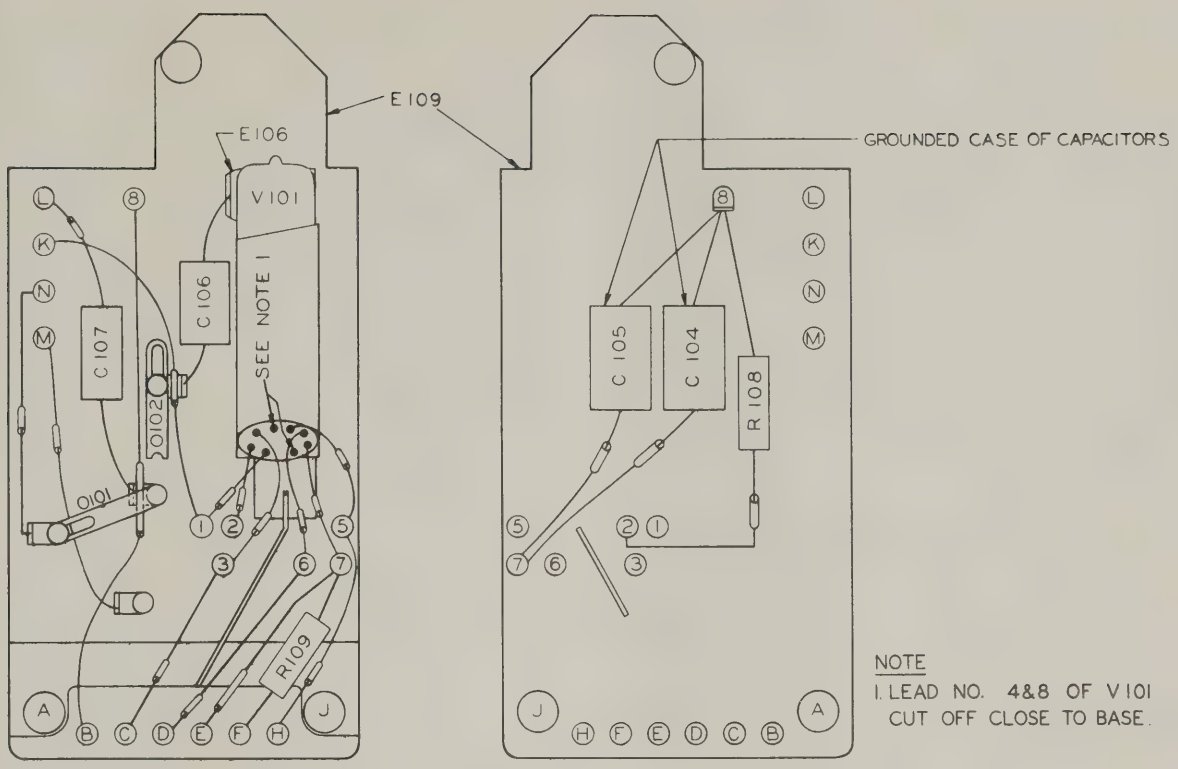


Figure 6-44. Antenna Plug-in Board Z101, Wiring Diagram

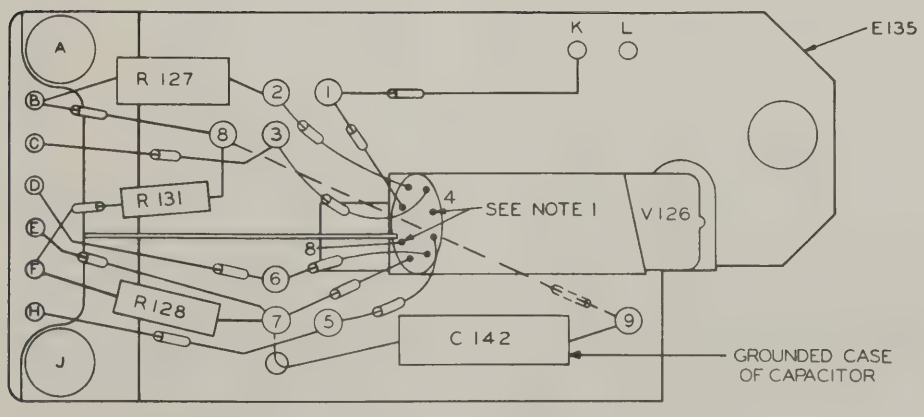


Figure 6-45. R-F Amplifier Plug-in Board Z126, Wiring Diagram

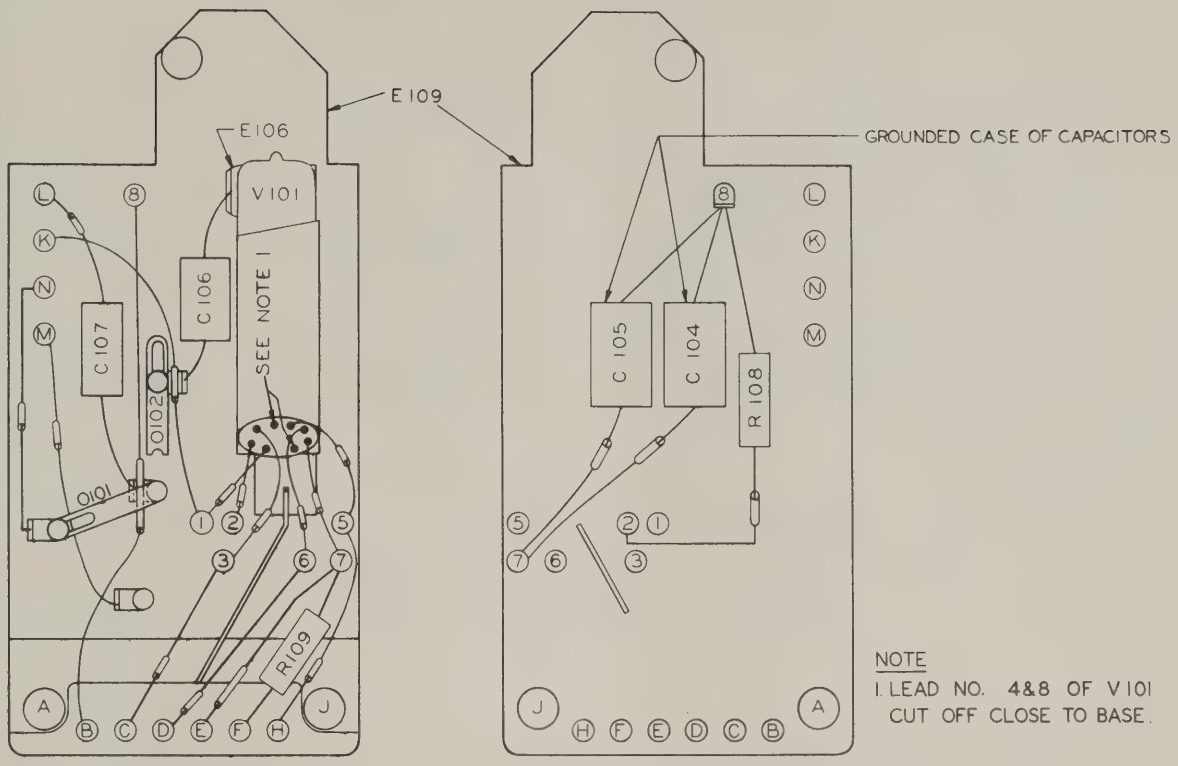


Figure 6-44. Antenna Plug-in Board Z101, Wiring Diagram

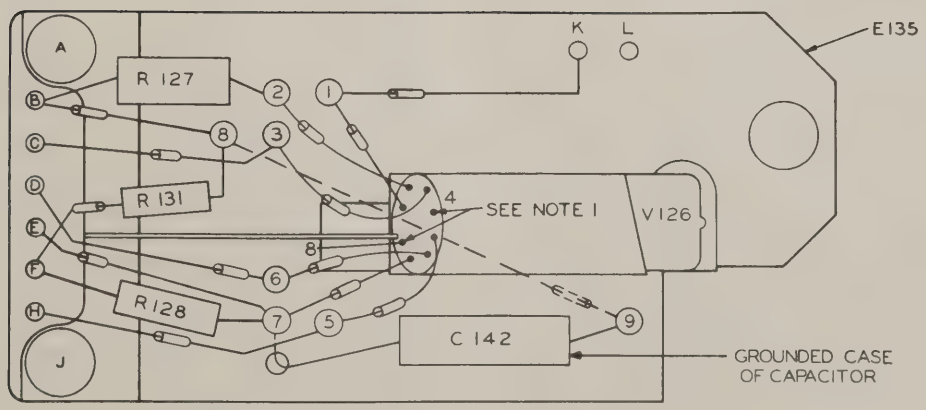
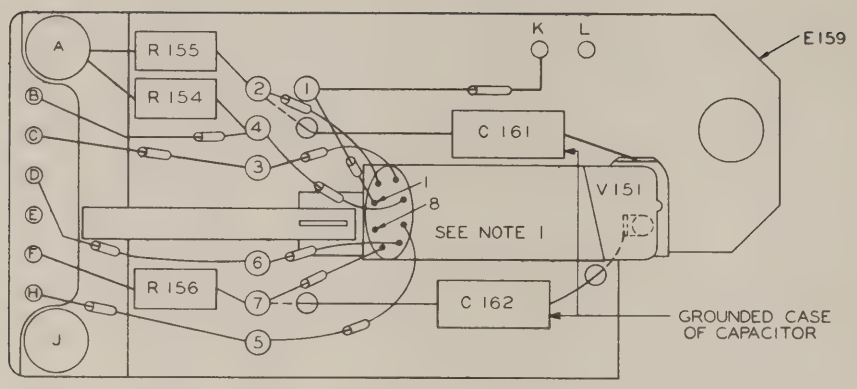
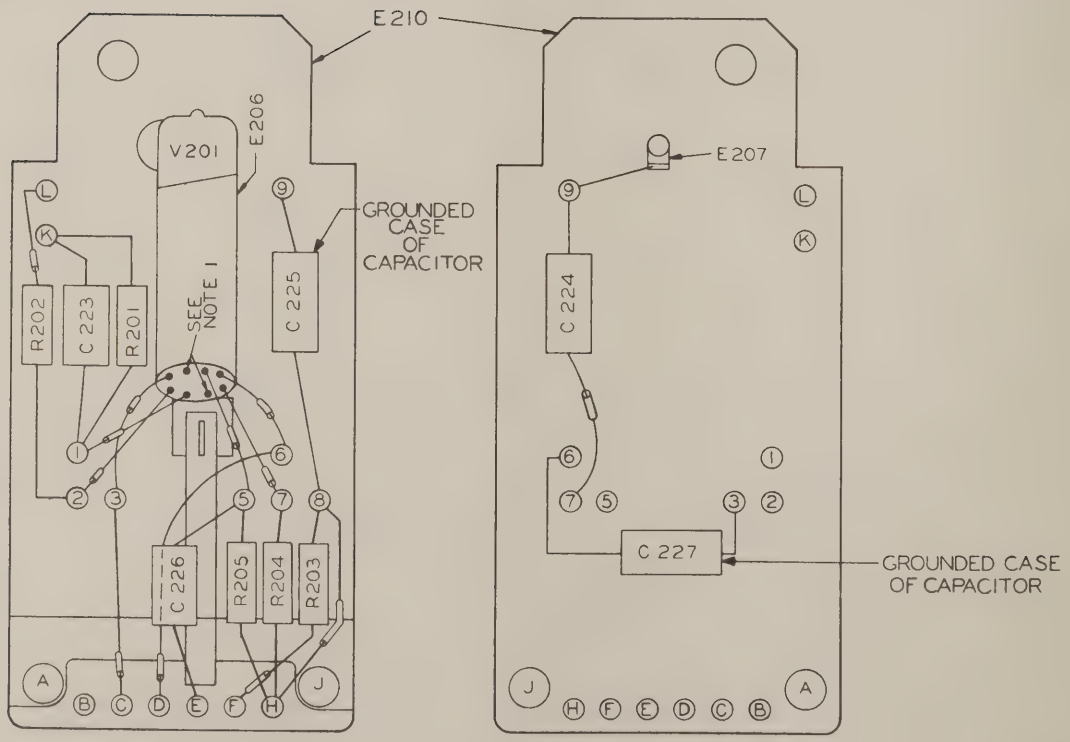


Figure 6-45. R-F Amplifier Plug-in Board Z126, Wiring Diagram



NOTE
1. LEAD NO.8 OF V151 CUT OFF CLOSE TO BASE.

Figure 6–46. Mixer Plug-in Board Z151, Wiring Diagram



NOTE –
1. LEAD NO. 4&8 OF V201 CUT OFF CLOSE TO BASE.

Figure 6–47. Oscillator Plug-in Board Z201, Wiring Diagram

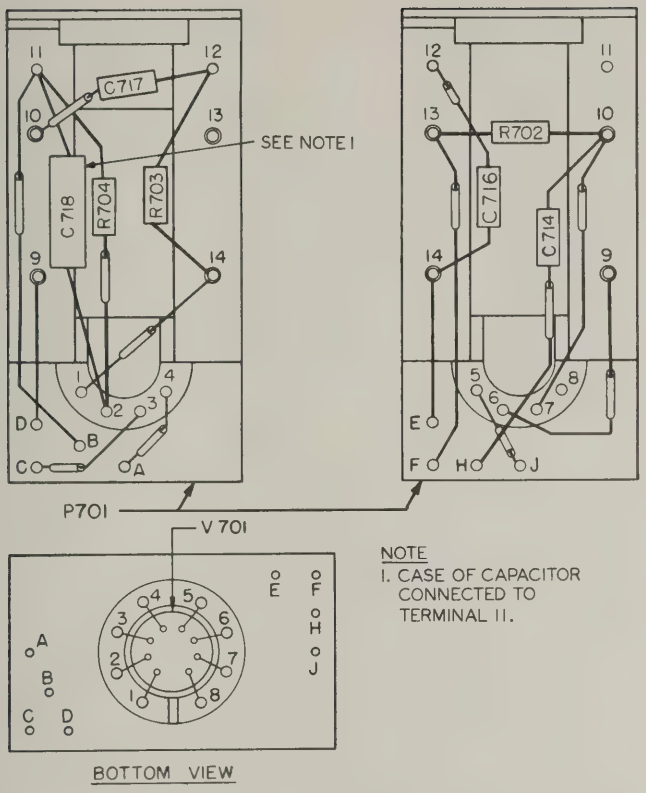


Figure 6-48. First I-F Amplifier Plug-in Unit Z701, Wiring Diagram

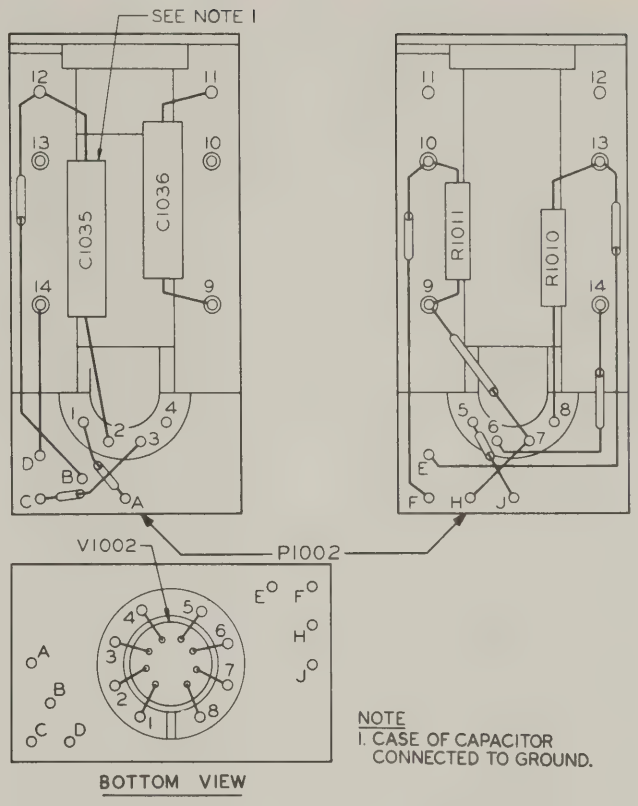


Figure 6-50. Second I-F Amplifier Plug-in Unit Z1006, Wiring Diagram

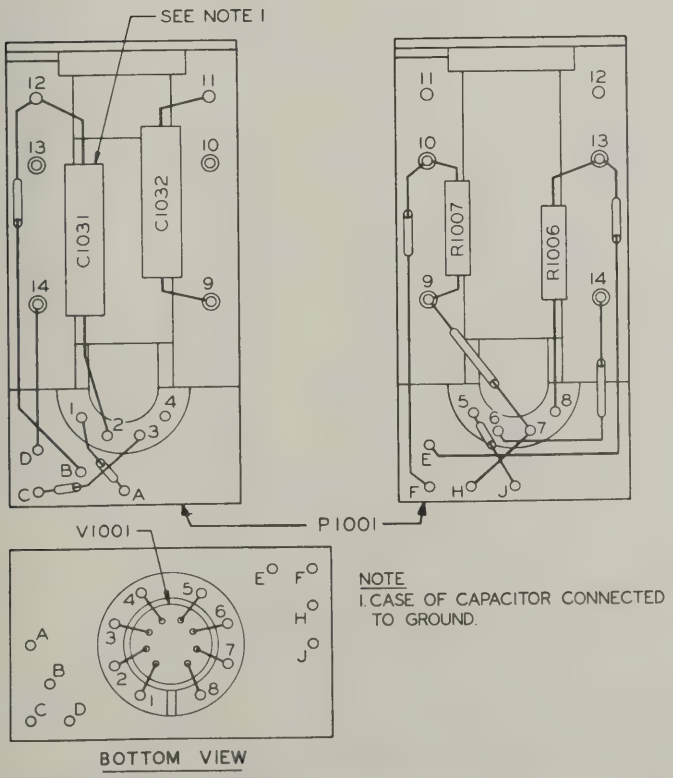


Figure 6-49. Second I-F Amplifier Plug-in Unit Z1004, Wiring Diagram

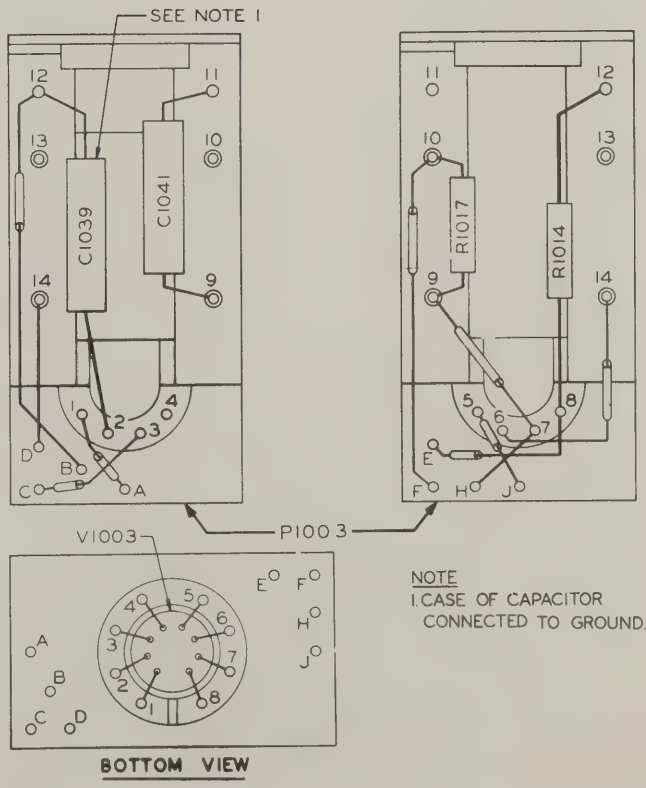


Figure 6-51. Second I-F Amplifier Plug-in Unit Z1008, Wiring Diagram

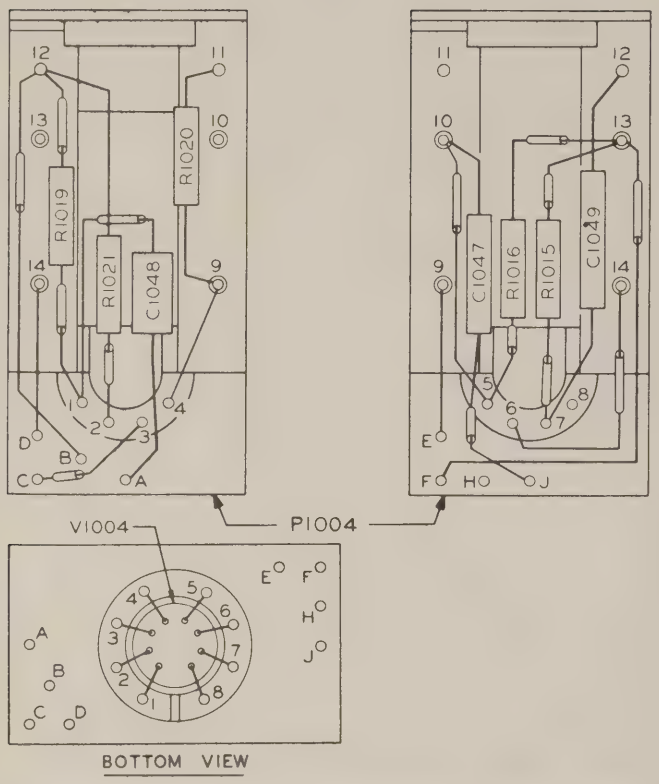


Figure 6–52. Second I-F Amplifier Plug-in Unit Z1010, Wiring Diagram

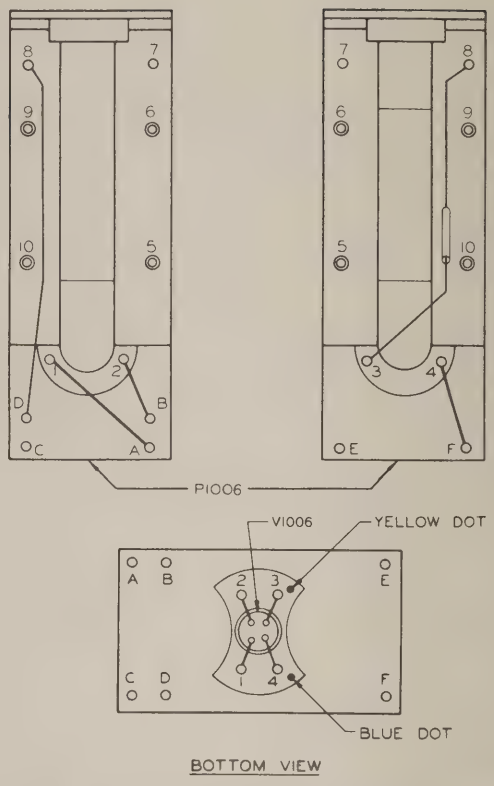


Figure 6–54. Second I-F Amplifier Plug-in Unit Z1013, Wiring Diagram

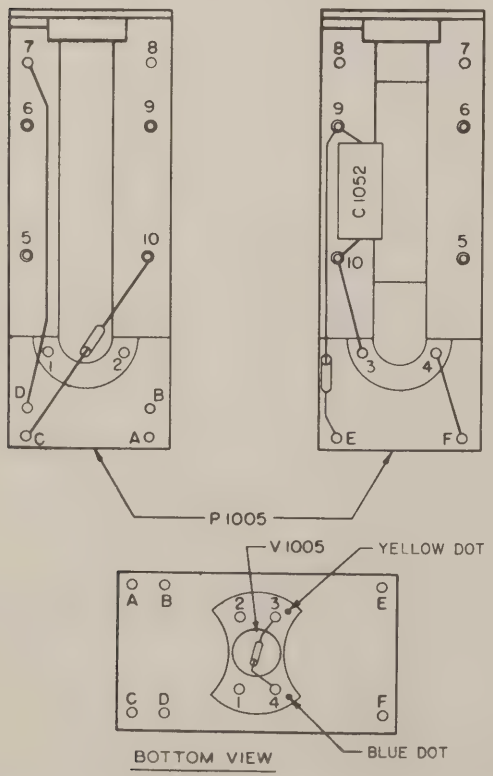


Figure 6–53. Second I-F Amplifier Plug-in Unit Z1012, Wiring Diagram

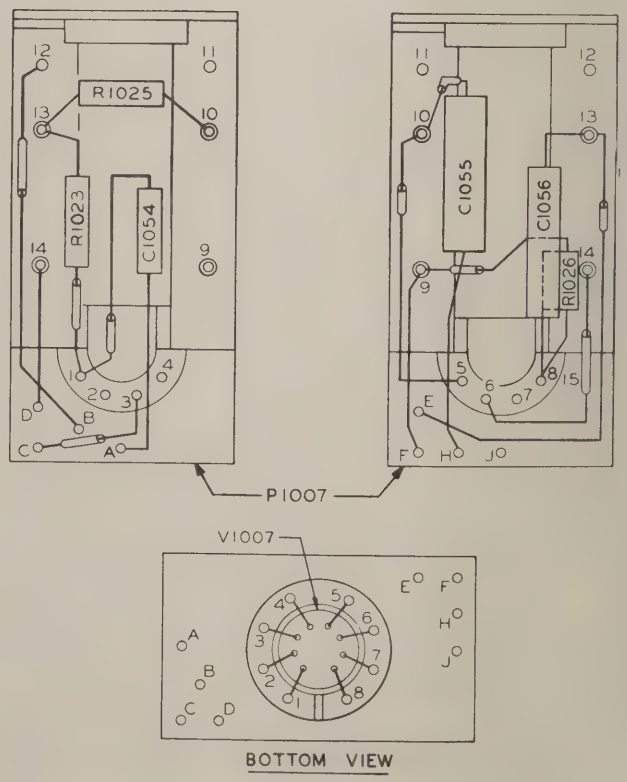


Figure 6–55. Second I-F Amplifier Plug-in Unit Z1014, Wiring Diagram

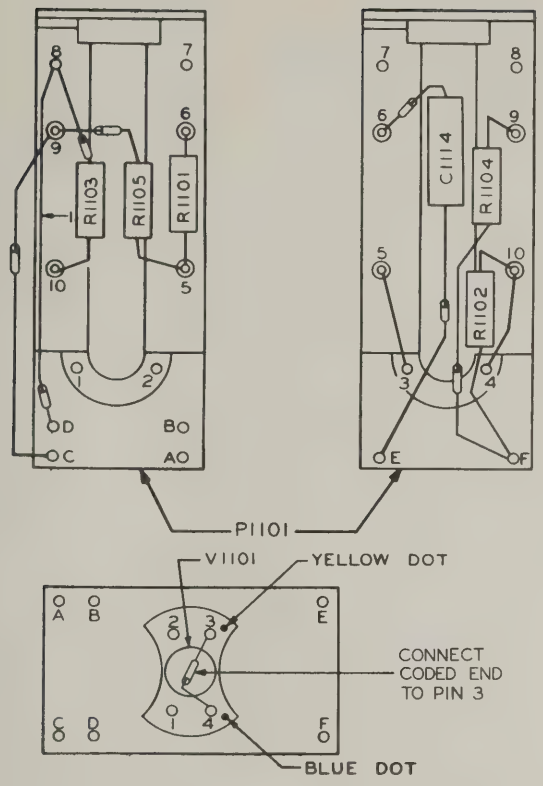


Figure 6-56. Audio Amplifier Plug-in Unit Z1101, Wiring Diagram

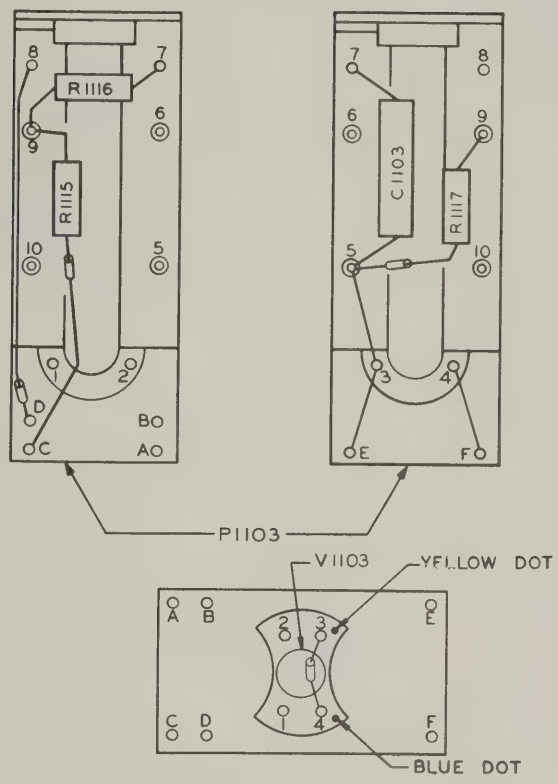


Figure 6-58. Audio Amplifier Plug-in Unit Z1103, Wiring Diagram

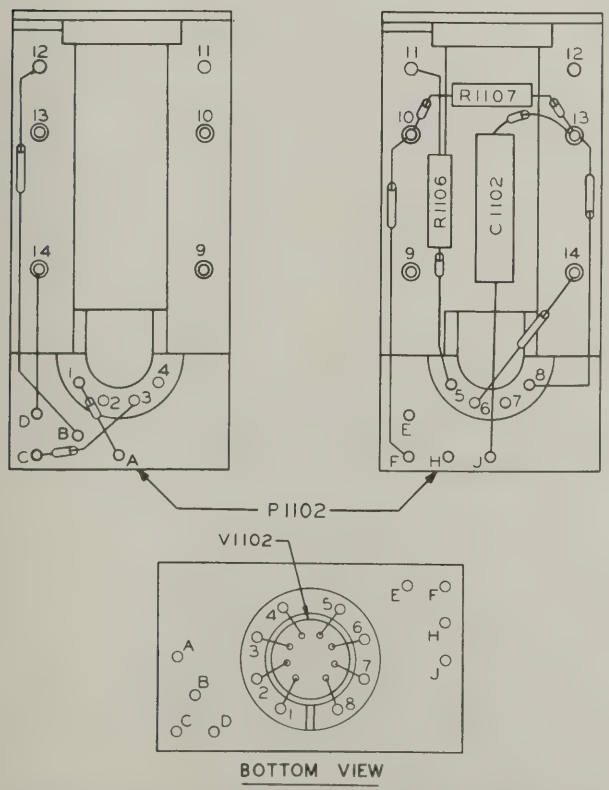


Figure 6-57. Audio Amplifier Plug-in Unit Z1102, Wiring Diagram

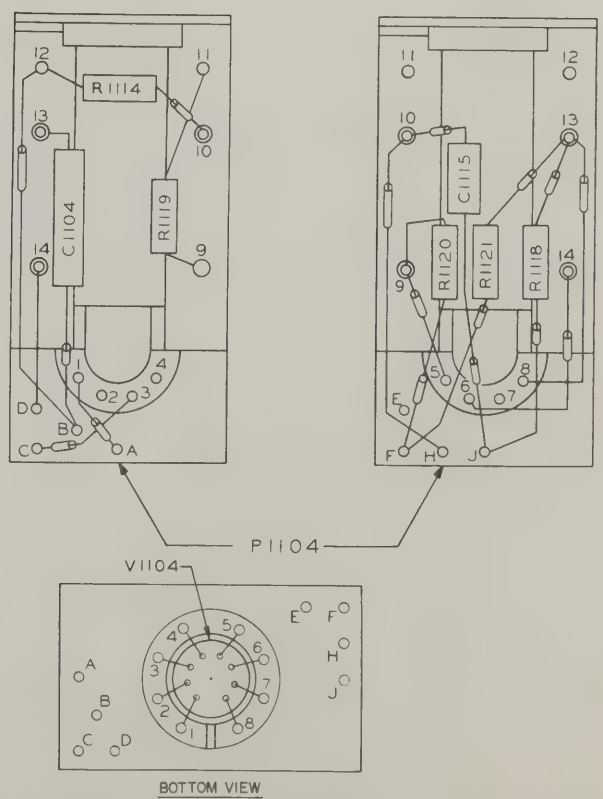


Figure 6-59. Audio Amplifier Plug-in Unit Z1104, Wiring Diagram

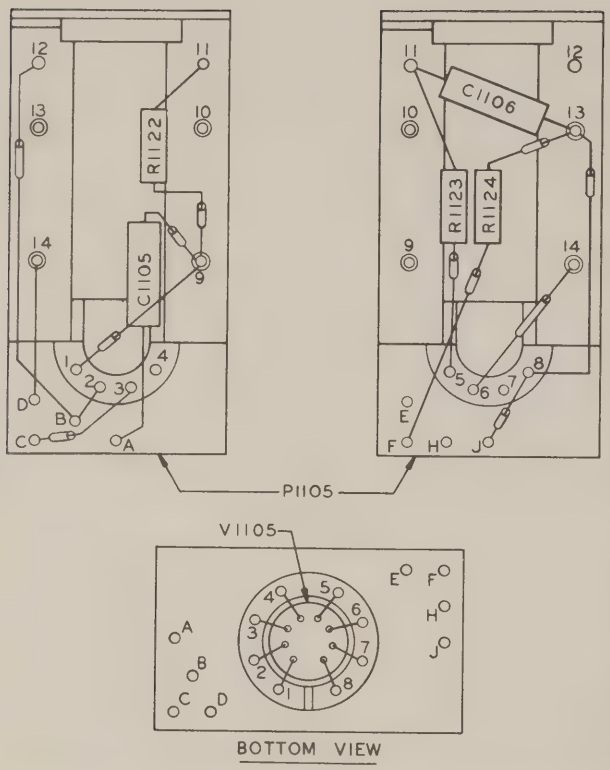


Figure 6–60. Audio Amplifier Plug-in Unit Z1105, Wiring Diagram

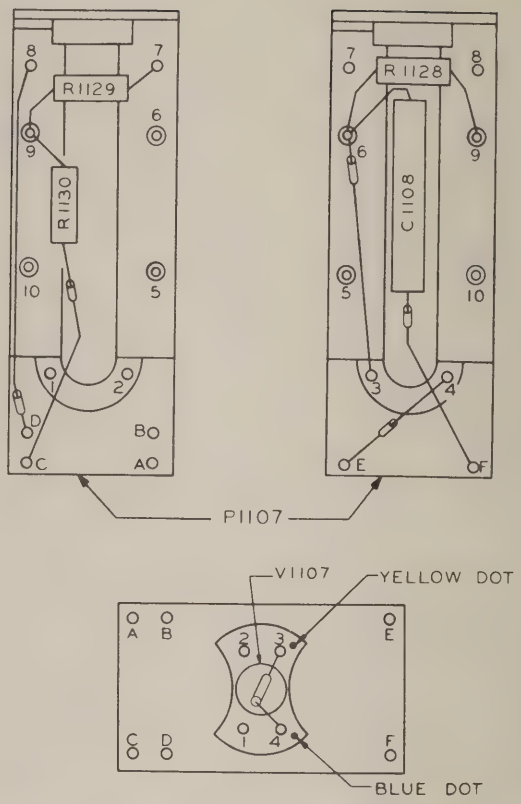


Figure 6–62. Audio Amplifier Plug-in Unit Z1107, Wiring Diagram

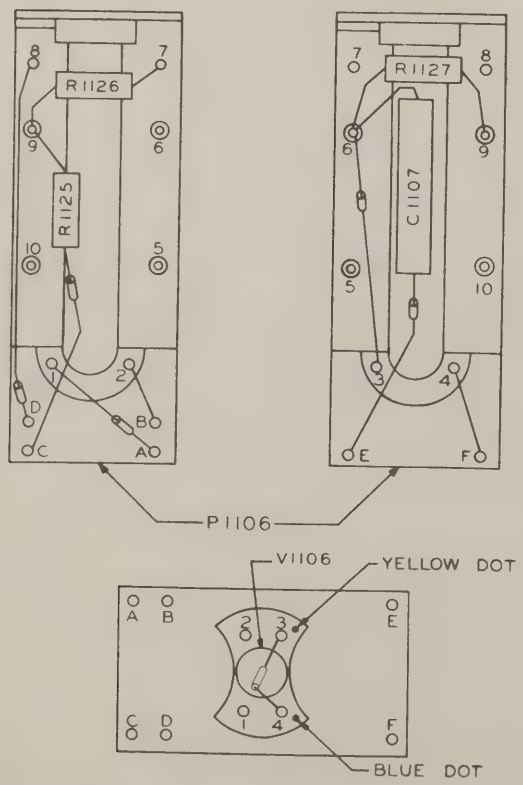


Figure 6–61. Audio Amplifier Plug-in Unit Z1106, Wiring Diagram

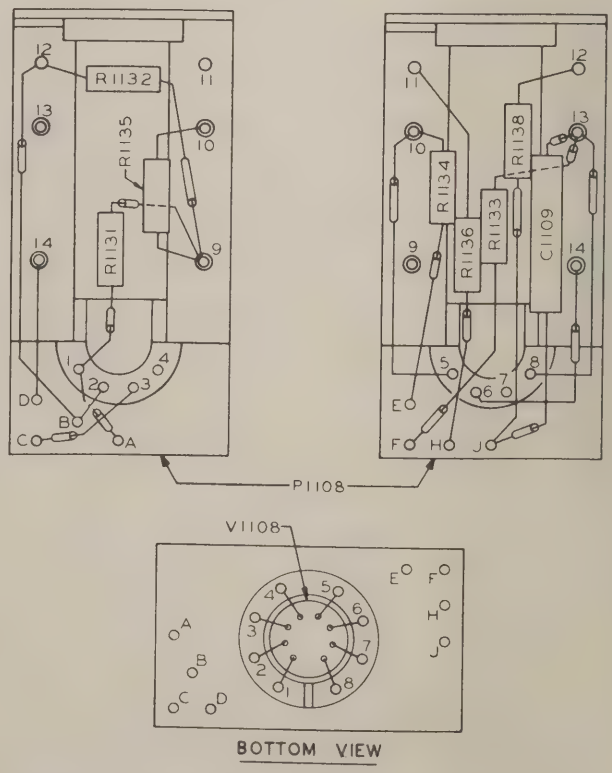


Figure 6–63. Audio Amplifier Plug-in Unit Z1108, Wiring Diagram

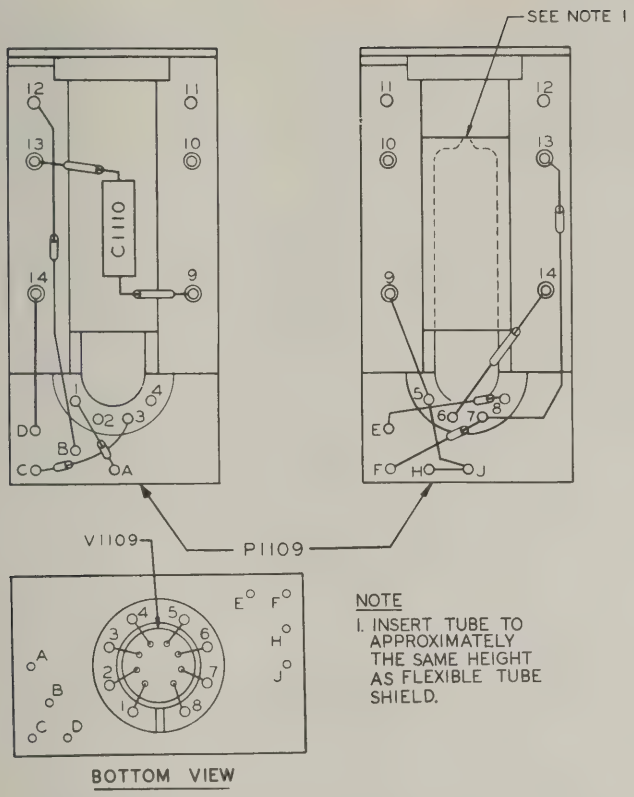


Figure 6-64. Audio Amplifier Plug-in Unit Z1109, Wiring Diagram

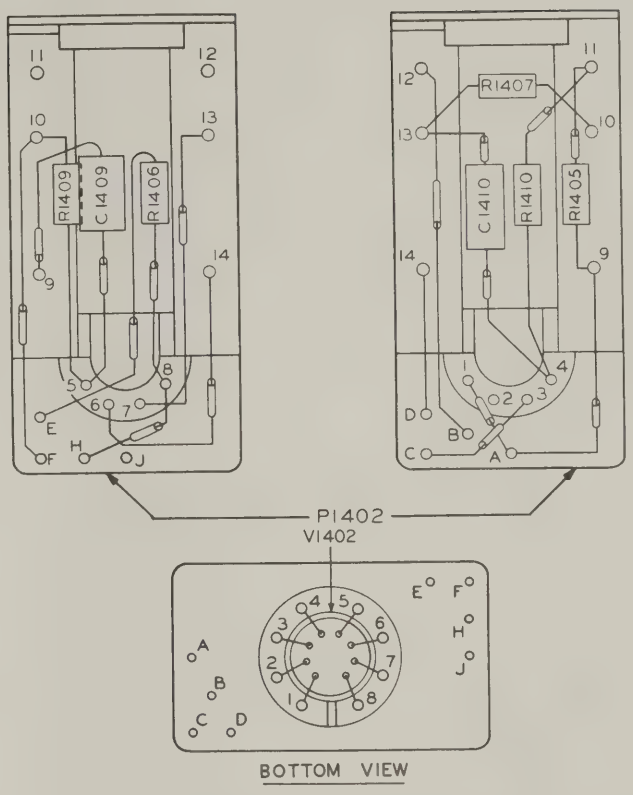


Figure 6-66. Crystal Calibrator Plug-in Unit Z1402, Wiring Diagram

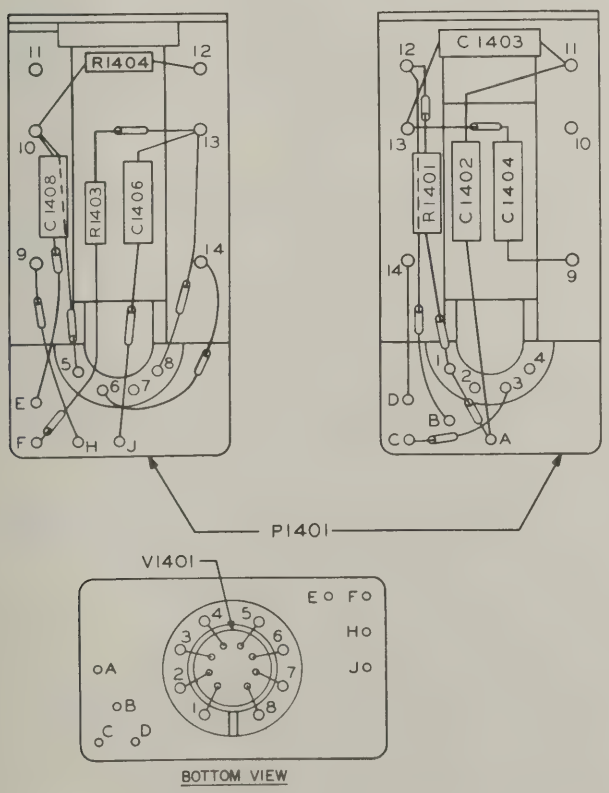


Figure 6-65. Crystal Calibrator Plug-in Unit Z1401, Wiring Diagram

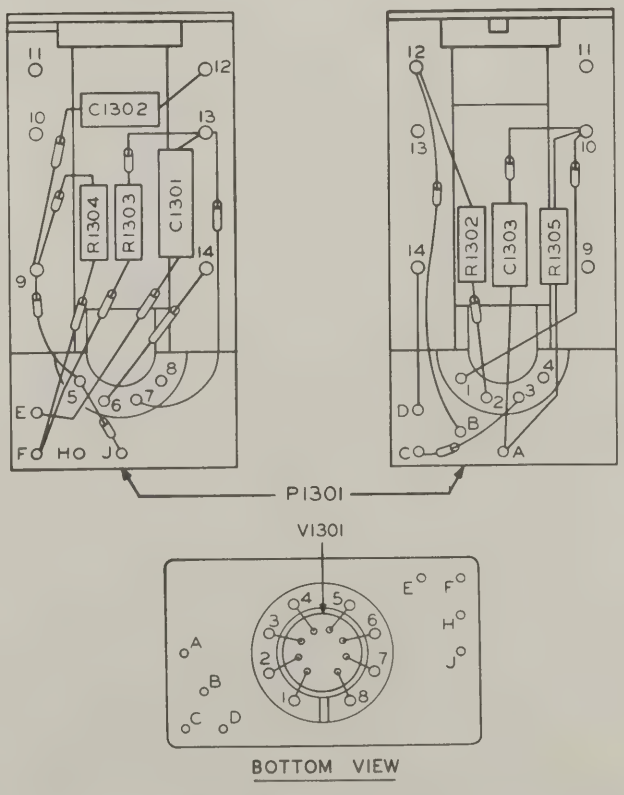


Figure 6-67. Beat Frequency Oscillator Plug-in Unit Z1302, Wiring Diagram

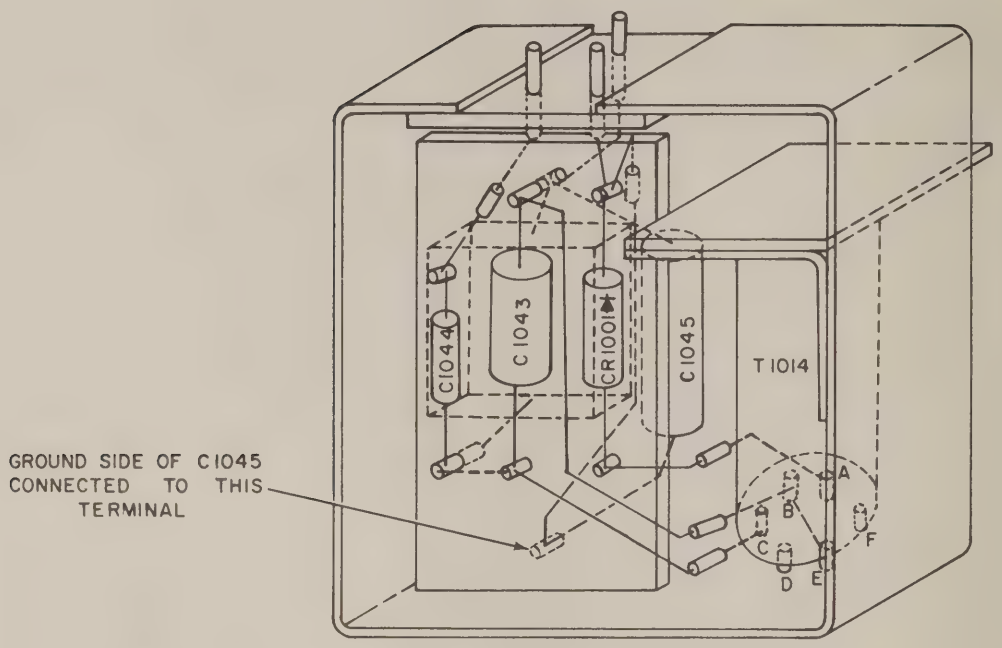


Figure 6-68. I-F Transformer Z1009 Assembly and Wiring Diagram

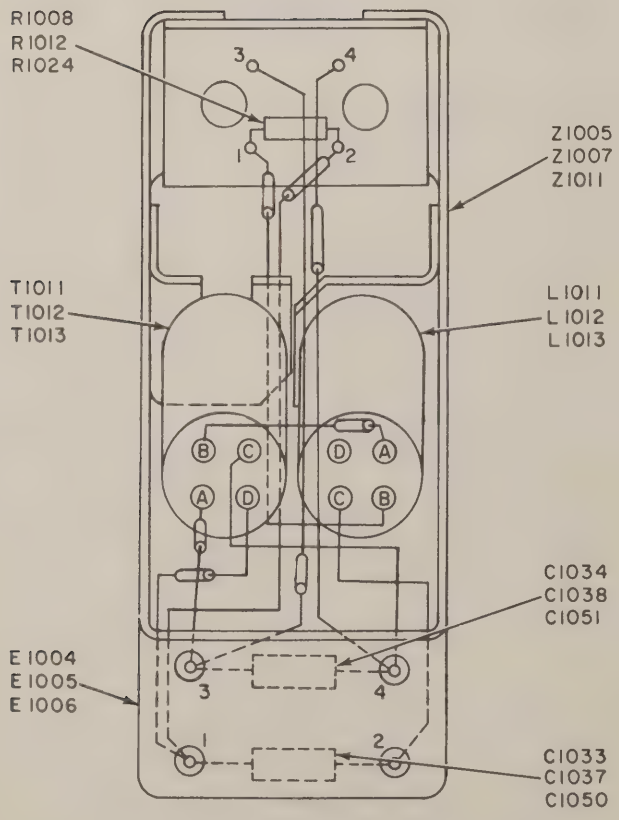


Figure 6-69. I-F Transformer Z1011 Wiring Diagram

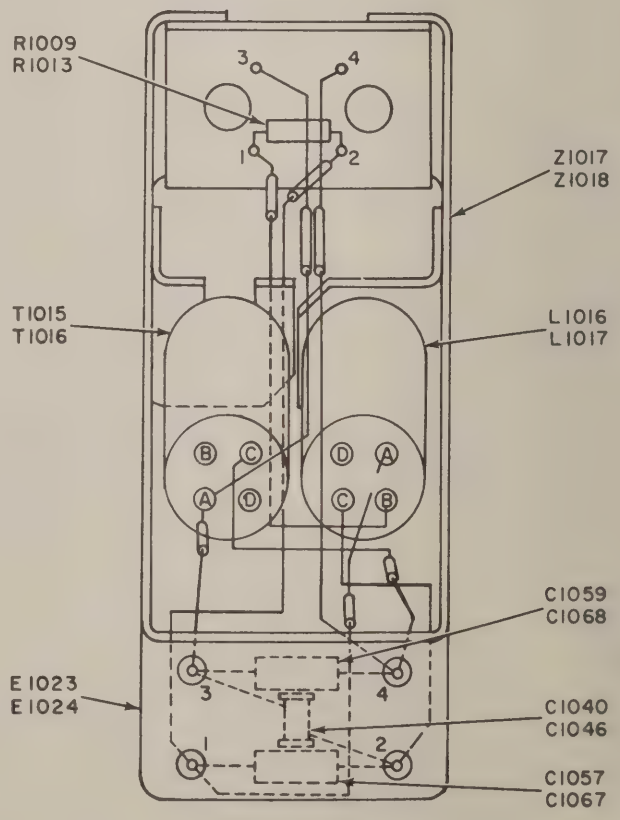


Figure 6-70. I-F Transformer Z1017 and Z1018 Wiring Diagram

SECTION 7
PARTS LIST

7–1. INTRODUCTION.

Reference designations (previously referred to as circuit symbols, reference symbols, etc.) have been assigned to identify all maintenance parts of the equipment. They are used for marking the equipment (adjacent to the part they identify) and are included on drawings, diagrams and the parts list. The letters of a reference designation indicate the kind of part (generic group), such as resistor, amplifier, electron tube, etc. The number differentiates between parts of the same generic group.

7–2. MAINTENANCE PARTS LIST.

Table 7–1 lists the major unit and its maintenance parts. Column 1 lists the reference designations of the various parts in alphabetical and numerical order. Column 2 refers to the explanatory notes that appear in paragraph 7–6 below. Column 3 gives the name and describes the various parts. Complete information is given for all key parts (parts differing from any part previously listed in this table). The name and description are omitted for other parts. However, reference is made to the key part for the data. Column 4 indicates how the part is used and gives its functional location in the equipment. It also includes the figure number of the pictorial illustration on which the part is identified.

7–3. STOCK NUMBER IDENTIFICATION AND LIST OF PARTS SUPPLIED.

Table 7–2 is arranged by key designation. The "Stock Number" column gives stock numbers for the various key parts. Therefore, if you have the reference designation for a part, find its key designation from table 7–1 before using this table. Stock numbers preceded by an asterisk (*) apply to replacement items which differ from the items initially supplied in the equipment.

7–4. STOCK NUMBER CROSS REFERENCE.

Table 7–3 lists by stock numbers all key parts that have been assigned stock numbers. If the stock number of a part used in the equipment is known, this table can be used to locate the description of the part in table 7–1.

7–5. LIST OF MANUFACTURERS.

Table 7–4 lists manufacturers of parts used in the equipment. The first column includes the abbreviations used in table 7–1 to identify manufacturers.

7–6. NOTES.

The following provide additional information about items listed in table 7–1.

1. Shop manufacture.
2. Replace with the substitute part having the stock number listed in table 7–2.
3. Stock number listed in table 7–2.
4. Non-replaceable in this application. Listed for reference only.
5. Will be procured on demand by the nearest Naval Shore Supply Activity.
6. Low failure item. If required requisition from ESO referencing Nav Ships 900,181A.
7. Assemble from component parts.

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
A001		RADIO SET EQUIPMENT: Magnavox part/dwg 708031–2	(See figure 1–1)
A002		RECEIVING SET, RADIO: R439A AM, (A–1, A–2 and F–1); for communication; 14kc to 600 kc in 5 bands; input; 105, 115, 125v; 50, 60, 400 cyc; 85 w nominal; mtd in aluminum cabinet; 18-7/16″ lg x 17-1/4″ wd x 8-23/32″ h less mtg bkt; 28 tube double superheterodyne ckt; incl five connector plugs for ext connections, and optional mtg bkt; five receptacles on back marked "IF", "ANT", "POWER", "AUDIO", "AUDIO"; two handles on front for removing from cabinet; incl BFO int xtal calibrator, 3 degrees of IF selectivity and 2 degrees of audio response; spec MIL–R–15132 (SHIPS), plus Amendment #4, dated April 1, 1951; Class B, Type 1, Magnavox part/dwg 708011–2 p/o A001	(See figure 1–1)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
A003		CABLE: Test Cable Assembly CG 1101 SRR accessory; ten pin, four socket electrical connector each end; 35″ lg; Magnavox part/dwg 468156–1 p/o A001	(See figure 1–1)
J001		CONNECTOR, PLUG: four round male cont; straight type, 1-29/64″ lg x 3/8″ wd x 55/64″ thk; 5 amp. 1000v; rec., phenolic body; two #4–40 x 5/16″ lg mtg studs on mtg/c; cont silver or gold pl., term hot tin dipped; Magnavox part/dwg 187981–5 p/o A003	
J002		CONNECTOR, PLUG: four round male cont; straight type, 1-29/64″ lg x 3/8″ wd x 55/64″ thk; 5 amp. 1000V; rec. phenolic body; two #4–40 x 5/16″ lg mtg studs on 1.40″ mtg/c; cont silver or gold pl., term hot tin dipped; Magnavox part/dwg 187981–6 p/o A003	
J003		SHELL, JUNCTION: 3-3/8″ lg x 1-11/16″ wd x 2″ thk; Magnavox part/dwg 188038–1 p/o A003	
J004		SHELL, JUNCTION: 3-3/8″ lg x 1-11/16″ wd x 2-3/32″ thk; Magnavox part/dwg 188039–1 p/o A003	
MP001		CABLE, CLAMP: alum alloy; 1/4″ ID, 13/16″ OD, 1″ thk; Magnavox part/dwg 187925–2 p/o A001	(See figure 1–1)
MP002		Same as MP001 p/o A001	(See figure 1–1)
MP003		CABLE, CLAMP: alum alloy; 9/16″ ID, 1-13/16″ OD, 1-1/8″ thk; Magnavox part/dwg 187925–4 p/o A001	(See figure 1–1)
MP004		CABLE, CLAMP; alum alloy; 5/8 ID, 1-7/16″ OD, 1-1/8″ thk; Magnavox part dwg 187925–5 p/o A003	
MP005		ADAPTER, SHAFT: Magnavox part/dwg 118430–2 p/o A003	
MP006		Same as MP005 p/o A003	
MP007		Same as MP005 p/o A003	
MP008		Same as MP005 p/o A003	
MP009		Same as MP005 p/o A003	
P001		CONNECTOR: AN3106A–16S–5S–16 contacts, 1 connector mating end; Magnavox part/dwg 187983–25	(See figure 1–1)
P002		CONNECTOR, PLUG: four socket female cont; straight type; 1-17/32″ lg x 31/32″ diam; 5 amp, 1000V; Magnavox part/dwg 187984–14 p/o A001	(See figure 1–1)
P003		Same as P002 p/o A001	(See figure 1–1)
P004		CONNECTOR, PLUG: Magnavox part/dwg 187862–1 p/o A001	(See figure 1–1)
P005		CONNECTOR, PLUG; one male cont; teflon insert; Magnavox part/dwg 187922–1 p/o A001	(See figure 1–1)
W001		CABLE: consists of 14 conductors; 0.625″ OD Magnavox part/dwg 468157–1 p/o A003	(See figure 1–1)
A101		ANTENNA UNIT ASSEMBLY: Magnavox part/dwg 707969–1 p/o A002	(See figure 1–3)
A115		R.F. UNIT ASSEMBLY: Magnavox part/dwg 707963–1 p/o A002	(See figure 1–3)
A119		COVER ASSEMBLY: U shaped Magnavox part/dwg 639797–5 p/o A115	(See figure 6–7)
A121		MIXER UNIT ASSEMBLY: Magnavox part/dwg 707973–1 p/o A002	(See figure 6–7)
A122		Same as A119 p/o A121	(See figure 6–7)
A126		COUPLING ASSEMBLY: Magnavox part/dwg 118450–1 p/o A115	Coupling for S126
A127		SHAFT ASSEMBLY: Magnavox part/dwg 118448–2 p/o A115	Coupling for S126
A151		Same as A126 p/o A121	Coupling for S151
A152		Same as A127 p/o A121	Coupling for S151

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
C101	2	CAPACITOR, FIXED: paper dielectric; single sect; 100,000 mmf p/m 20%; 100 vdcw; HS metal case; 15/16″ lg x 0.374″ diam; two axial wire lead term; int gnd; marked w/cap, tol. working v, and mfr name; oper temp range −55°C to +85°C; Sprague Type 81P10401S3; Magnavox part/dwg 257910-11	Grid Bypass, V101 (See figure 6-12)
C102	3	CAPACITOR, FIXED: mica; 330 mmf p/m 5%; 500 vdcw; Magnavox part/dwg 257853-26	Fixed Antenna Trimmer (See figure 6-12)
C103	3	CAPACITOR, VARIABLE: air dielectric plate meshing type; single sect; 3 to 33 mmf; SLC; 600 v RMS 60 cyc; 15/32″ lg x 5/8″ wd x 3/4″ h excluding shaft; shaft 0.2183″ diam x 13/32″ lg; extension shaft adj; 28 brass nickel pl; 360 deg rotation either direction; ceramic insulation, solder lug term; single hole mtg by 5/16″-32 thd x 1/4″ bushing, Magnavox part/dwg 267821-1	Variable, Antenna Trimmer (See figure 6-12)
C104	2	CAPACITOR, FIXED: paper dielectric; single sect; 47,000 mmf p/m 20%; 200 vdcw; Sprague Type #81P47302S3; Magnavox part/dwg 257910-13; p/o Z-101	Screen Bypass, V101 (See figure 6-44)
C105		Same as C104; p/o Z101	Screen Bypass, V101 (See figure 6-44)
C106	3	CAPACITOR, FIXED: mica; 220 mmf/pm 5%; 500 vdcw; Magnavox part/dwg 257853-23; p/o Z101	Fixed Antenna Trimmer for LO Input Antenna (See figure 6-44)
C107	2	CAPACITOR, FIXED: paper dielectric; single sect; 10,000 mmf p/m 20%; 100 vdcw; Sprague Type SP-91P-A1FF103M; Magnavox part/dwg 257910-1; p/o Z-101	Antenna Blocking (See figure 6-44)
C126	3	CAPACITOR, FIXED: ceramic dielectric; 27 mmf p/m 5%; 500 vdcw; neg temp coef 1400 mmf/mf/°C tol p/m 15%; p.475″ lg x 0.230″ diam less term; two axial wire lead term 1-1/4″ lg hot solder dip; ceramic ins; all parts to be ins; oper temp range −55°C to +85°C; parts to be color coded or stamped w/mfr name and type #, cap, and tol; Magnavox part/dwg 257904-3	Compensating Capacitor, T130 Secondary (See figure 6-32)
C127	2	CAPACITOR, FIXED: paper dielectric; single sect; 2200 mmf p/m 10%; 300 vdcw max at 85°C; molded phenolic case; Sprague Type 2200 mmf; Magnavox part/dwg 257805-16	Loading Capacitor, T130 Primary See figure 6-32)
C128	3	CAPACITOR, VARIABLE: air dielectric; plate meshing type; single sect; 2.6 to 19.7 mmf; 500 v 60 cyc RMS; SLC; 1-5/32″ lg x 5/8″ wd x 3/4″ h excluding shaft; shaft 0.187″ diam x 1/2″ lg; scdr adj; 10 stator, 11 rotor plates; 360 deg rotation either direction; ceramic ins; solder lug term; single hole mtg by 1/4″-32 x 1/4″ lg bushing; "Q" 500 min; Magnavox part/dwg 267817-1 p/o A115	Trimmer Capacitor, T130 Secondary (See figure 6-32)
C129		Same as C126	Compensating Capacitor, T129 Secondary (See figure 6-32)
C130	2	CAPACITOR, FIXED: paper dielectric; single sect; 4700 mmf p/m 10%; 200 vdcw at 85°C, 150 v DC at 125°C; molded phenolic case; Sprague Type 75P47292; Magnavox part/dwg 257805-12	Loading Capacitor, T128 Primary (See figure 6-32)
C131		Same as C128 p/o A115	Trimmer Capacitor, T129 Secondary (See figure 6-32)
C132	2	CAPACITOR, FIXED: JAN type CC21UJ270J; ceramic dielectric; 27 mmf p/m 5%; 500 vdcw; spec JAN-C-20A; Magnavox part/dwg 257909-15	Compensating Capacitor, T128 Secondary (See figure 6-32)
C133	2	CAPACITOR, FIXED: paper dielectric; single sec; 12,000 mmf p/m 10%; 200 vdcw at 85°C; 150 vdcw at 125°C; Sprague Pokar Type 75P; 12,000 mmf; Magnavox part/dwg 257805-14	Loading Capacitor, T127 Primary (See figure 6-32)
C134		Same as C128	Trimmer Capacitor, T128 Secondary (See figure 6-32)
C135		Same as C132	Compensating Capacitor, T127 Secondary (See figure 6-32)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
C136	2	CAPACITOR, FIXED: paper dielectric; single sect; 0.047 mf p/m 10%; 100 vdcw; Sprague Type 81P–47391S3; Magnavox part/dwg 257910–8	Loading Capacitor, T126 Primary (See figure 6–32)
C137		Same as C128	Trimmer Capacitor, T127 Secondary (See figure 6–32)
C138		Same as C132	Compensating Capacitor, T126 Secondary (See figure 6–32)
C139	2	CAPACITOR, FIXED: paper dielectric; single sect; 10,000 mmf p/m 10%; 100 vdcw at 125°C; Sprague Type 75P10391; Magnavox part/dwg 257805–11	Loading Capacitor, T127, T128, T129 Primary (See figure 6–32)
C140		Same as C128	Trimmer Capacitor, T126 Secondary (See figure 6–32)
C141		Same as C101	Blocking Capacitor, T126 thru T130 Secondaries (See figure 6–32)
C142	3	CAPACITOR, FIXED: paper dielectric; single sect; 100,000 mmf p/m 20%; 200 vdcw; Sprague Cat #91P10402S2; Magnavox part/dwg 257910–21	Screen Bypass, V126 (See figure 6–45)
C143	3	CAPACITOR, FIXED: ceramic; JAN type CC21CH120J; 12 mmf p/m 5%; 500 vdcw; spec JAN–C–20A; Magnavox part/dwg 257909–13	Coupling Capacitor, Calibrator Input (See figure 6–32)
C151		Same as C126	Compensating Capacitor, T155 Secondary (See figure 6–33)
C152		Same as C128	Trimmer Capacitor, T155 Secondary (See figure 6–33)
C153		Same as C132	Compensating Capacitor, T154 Secondary (See figure 6–33)
C154		Same as C128	Trimmer Capacitor, T154 Secondary (See figure 6–33)
C155	3	CAPACITOR, FIXED: ceramic dielectric; 22 mmf p/m 5%; 500 vdcw; Magnavox part/dwg 257904–2	Compensating Capacitor, T153 Secondary (See figure 6–33)
C156		Same as C128	Trimmer Capacitor, T153 Secondary (See figure 6–33)
C157		Same as C132	Compensating Capacitor, T152 Secondary (See figure 6–33)
C158		Same as C128	Trimmer Capacitor, T152 Secondary (See figure 6–33)
C159		Same as C132	Compensating Capacitor, T151 Secondary (See figure 6–33)
C160		Same as C128	Trimmer Capacitor, T151 Secondary (See figure 6–33)
C161		Same as C101; p/o Z151	Cathode Resistor Bypass, V151 (See figure 6–46)
C162	2	CAPACITOR, FIXED: paper dielectric; single sect; 100,000 mmf p/m 20%; 200 vdcw; Sprague Type 81P10402S1; Magnavox part/dwg 257910–19; p/o Z151	Screen Bypass, V151 (See figure 6–46)
E101		TERMINAL, STUD: feedthru, thd; brass, silver pl; round post shape; 1-1/16″ lg x 7/32″ diam max. Magnavox part/dwg 208107–2	Antenna Unit Connection to C251D (See figure 6–31)
E102		Same as E101	Antenna Unit Connection to C251D (See figure 6–31)

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
E103	3	BOARD, TERMINAL; general purpose; 10 post type solder lug term; spaced 5/8″, 5/32″, 5/8″, 5/32″, 5/8″, 5/32″, 5/8″, 5/32″ 5/8″ c to c; lam glass cloth, silicone resin board, 1/16″ thk; 4-1/8″ lg x 1/4″ wd x 7/32″ thk o/a approx; five mtg holes 0.073″ diam spaced 0.781″ c to c; marked R105, R104, R103, R102, R101; Magnavox part/dwg 208161-8	Supports Resistors R101 Thru R105 (See figure 6-31)
E104	1	BOARD, TERMINAL: general purpose; six post type term; three term spaced 5/16, 1/4″ c to c in ea of two rows; rows spaced 1-1/4″ c to c; lam glass cloth board; 1-1/2″ lg x 1-3/32″ wd x 7/16″ thk o/a approx; two mtg holes 0.113″ diam on 1.062″ mtg/c in "L" shape bkt; marked R107, C101, R106, C102; Magnavox part/dwg 208149-1	Supports Resistors and Capacitors (See figure 6-31)
E109	4	BOARD, TERMINAL: lam glass cloth, silicone resin, ten solder post type, one pin type, two solder post feedthru, six stud and four solder lug type term, w/o barriers, 3″ lg x 1-7/16″ wd x 15/16″ d o/a; mtd by two term pins at one end in corners 0.093″ diam. 1.156″ c to c, 0.328″ lg projecting; w/shield, shield mount, retainer stop, grounding strap, bkts, links, spacers, and springs; Magnavox part/dwg 208207-1; p/o Z101	Foundation of Z101 (See figure 6-31)
E126		Same as E101	RF Unit Connection to C251C (See figure 6-32)
E127		Same as E101	RF Unit Connection to C251C (See figure 6-32)
E128	1	BOARD, TERMINAL: general purpose, six post type term, three term spaced 5/16″, 1/4″ c to c in ea of two rows, rows spaced 1-1/4″ c to c, lam glass cloth board, 1-1/2″ lg x 1-3/32″ wd x 7/16″ thk o/a approx; two mtg holes 0.113″ diam on 1.062″ mtg/c in integral "L" shape bkt; marked C136, C139, C143; Magnavox part/dwg 208149-3	Supports Resistors and Capacitors (See figure 6-32)
E130	3	BOARD, TERMINAL: mtg board for resistors and capacitors; five brass rod short term lugs, hot solder dip finish; first term ctr 0.812″ from end of board then c to c (1) to (2) 0.938″ (3) 1.563″ (4) 2.422″ (5) 3.188″; lam glass cloth, silicone resin board, 4-1/8″ lg x 3/8″ wd x 7/32″ h o/a; five mtg holes 0.073″ diam 0.781″ c to c w/ 1/2″ at ea end; mark in three places as shown on dwg with 1/16″ high std characters satin black synthetic C133, C130, C127, rivet term in place; Magnavox part/dwg 208161-1	Supports Capacitors (See figure 6-32)
E131	1	BOARD, TERMINAL: general purpose, six post type term; three term spaced 5/16″, 1/4″ c to c in each of two rows, rows spaced 1-1/4″ c to c, lam glass cloth board; 1-1/2″ lg x 1-3/32″ wd x 7/16″ thk o/a approx; two mtg holes 0.113″ diam on 1.062″ mtg/c in integral "L" shape bkt; marked C141, R126, R130, R129; Magnavox part/dwg 208149-2	Supports Resistors and Capacitors (See figure 6-32)
E132	4	For reference only	Supports Wiring (See figure 6-32)
E133	4	For reference only	Supports Wiring (See figure 6-32)
E134	4	For reference only	With E133 Supports Wiring (See figure 6-32)
E135	4	BOARD, TERMINAL: lam glass cloth, silicone resin; 16 solder post feedthru type, two solder post type, and one solder lug type term; w/o barriers; 3″ lg x 1-7/16″ wd x 1/16″ thk less term; mtd by two term pins spaced on 1.156″ mtg/c; w/shield and shield mount; Magnavox part/dwg 208208-1	Foundation for Z126 (See figure 6-32)
E136	4	For reference only	Insulates E132 from Chassis (See figure 6-32)
E151		Same as E101 p/o A121	Mixer Unit Connection to C251B (See figure 6-33)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
E152		Same as E101 p/o A121	Mixer Unit Connection to C251B (See figure 6–33)
E153	3	BOARD, TERMINAL: mtg board for resistors; five brass rod short term lugs, hot solder dip finish; first term ctr 1/8″ from end of board then 0.781″ c to c, lam glass cloth, silicone resin board; 3-49/64″ lg x 3/8″ wd x 7/32″ h o/a; five mtg holes 0.073″ diam. 0.781″ c to c, 0.515″ from one end of board to first ctr; mark in three places as shown on dwg with 1/16″ high std characters satin black synthetic R153, R152, R151; rivet term in place; Magnavox part/dwg 208161–2 p/o A121	Supports Resistors (See figure 6–33)
E154	4	For reference only	Supports Wiring (See figure 6–33)
E157	4	For reference only	Supports Wiring (See figure 6–33)
E158	4	For reference only	With E157 Supports Wiring (See figure 6–33)
E159	1	BOARD, TERMINAL: lam glass cloth, silicone resin; incl 17 feed-thru type and one solder lug type term; w/o barriers; 3″ lg x 1-7/16″ wd x 1/16″ thk less term; mtd by two 0.093″ diam x 0.328″ lg pin term on one end in corners, on 1.156″ c to c; Magnavox part/dwg 208209–1; p/o Z151	Foundation of Z151 (See figure 6–46)
E181		SPRING, GROUNDING: beryllium copper; 7-1/6″ lg x 17/32″ wd x 0.005″ thk stock; eight mtg holes 0.102″ diam, 0.843″ c to c, 5/32″ from one end to first ctr; Magnavox part/dwg 437807–4 p/o A101	RF Shield (See figure 6–12)
E182		Same as E181 p/o A101	RF Shield (See figure 6–12)
E183		SPRING, GROUNDING: beryllium copper; 1-17/32″ lg x 0.187″ wd x 0.008 thk stock; four prongs; four mtg holes 0.072″ diam, 0.343″ c to c; Magnavox part/dwg 639375–2 p/o MP122	RF Shield
E184		Same as E183 p/o MP122	RF Shield
E185		Same as E183 p/o MP122	RF Shield
E186		Same as E183 p/o MP122	RF Shield
E199		TERMINAL, GROUND: brass; eye type, bent; two holes 0.070″ diam; "L" shape right angle bend; 3/16″ wide; Magnavox part/dwg 208113–2 p/o Z126	
H103	1	BUSHING: brass rod, white nickel finish; both male and female; 7/16″ OD, one side flatted on 0.39875″ across flats, 1/4″ thk, 0.120″ diam of hole, 1/16″ lg x 0.189″ diam shoulder one end; part/dwg 118407–2 p/o A101	Spacer for E101 (See figure 6-31)
H104	1	BUSHING: Brass, Navy Spec. 47B2h, Nickel finish, 9/32 in. dia., 3/16 in. lg.; Magnavox part/dwg 118350–2	Spacer for E101 (See figure 6–31)
H108		STUD: material, brass, Navy Spec 46B6K, silver plated, head 3/32″ w, 11/64″ lg; Magnavox part/dwg 118420–2 p/o A101	
H120	1	SCREW: material, stainless steel, A151430; rd head cross recess drive, 0.603 in. lg. Magnavox part/dwg 108324–104 p/o A101	
H121	1	Same as H120 p/o A101	
H122	1	Same as H120 p/o A101	
H126		Same as H104	Spacer for E126
H128		Same as H103	Spacer for E126
H139	1	SCREW: Stainless steel, 0.540 in. lg; Magnavox part/dwg 108324–101 0/o A101	
H140	1	Same as H139	

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
H151		Same as H104 p/o A121	Spacer for E151
H154		Same as H103 p/o A121	Spacer for E152
J101	2	CONNECTOR, RECEPTACLE: 11 round male cont, pol, straight type; 1-29/64″ lg x 3/8″ wd x 55/64″ thk; 5 amp, 1000v; rectangular, phenolic body; two #4–40 x 5/16″ lg mtg studs on 1.140″ mtg/c; cont silver or gold pl, term hot tin dipped; Magnavox part/dwg 187989–6 p/o A101	Plug-in Connector, Antenna Unit (See figure 6–31)
J102	2	CONNECTOR, RECEPTACLE: four round female cont; straight type; 0.812″ lg x 19/32″ wd x 0.343″ thk o/a approx; rectangular Teflon body; three 0.102″ diam mtg holes spaced 1/4″ between ctr; cont portion raised 3/32″ above mtg portion; Magnavox part/dwg 188016–1 p/o A101	Receptacle for Z101 (See figure 6–31)
J103	2	CONNECTOR, RECEPTACLE: six small round female cont, two large round female cont; straight type; 1.500″ lg x 3/8 wd x 1.125″ h o/a approx; rectangular, molded plastic body; two #4–40 x 3/8″ lg mtg studs on 1.156″ mtg/c extend through body from two large cont; Magnavox part/dwg 188014–1 p/o A101	Receptacle for Z101 (See figure 6–31)
J126		Same as J101 p/o A115	Plug-in Connector for RF Unit (See figure 6–32)
J127	2	CONNECTOR, RECEPTACLE: two round female cont; straight type; 13/16″ lg x 15/32″ wd x 19/32″ thk o/a approx; rectangular body; two 0.102″ diam mtg holes on 7/32″ mtg/c; cont portion raised 29/64″ lg x 23–64″ wd x 3/32″ thk; Magnavox part/dwg 188015–1 p/o A115	Receptacle for Z126 (See figure 6–32)
J128		Same as J103 p/o A115	Receptacle for Z126 (See figure 6–32)
J151		Same as J101 p/o A121	Plug-in Connector for Mixer Unit (See figure 6–33)
J152		Same as J127 p/o A121	Receptacle for Z151 (See figure 6–33)
J153		Same as J108 p/o A121	Receptacle for Z151 (See figure 6–33)
MP101		SPRING, COMPRESSION: music wire; Magnavox part/dwg 108274–501 p/o Z101	
MP102		Same as MP101 p/o Z101	
MP103		Same as MP101 p/o Z101	
MP105		SPACER: brass; 3/8″ lg x 7/32″ diam max; #2-56 tapped thru; 0.138″ diam shoulder 0.125″ lg with 0.109″ c'bore 3/32″ deep; 11/64″ diam shoulder other end; Magnavox part/dwg 118425-2 p/o Z101	
MP106		Same as MP105 p/o Z101	
MP107		Same as MP105 p/o Z101	
MP108		Same as MP105 p/o Z101	
MP112		INSERT: brass rod; 7/16″ diam stock; #6–32 tapped thru; 0.250″ diam shoulder 3/16″ lg; 1/32″ x 45° chamfer; 35 pitch straight knurl 3/16″ from chamfered end; Magnavox part/dwg 118389–2 p/o A101	
MP113		Same as MP112 p/o A101	
MP114		BEARING: leaded phos-brze; 3/8″ diam x 0.906 lg; 35 pitch straight knurl 1/4″ lg; 1/32″ x 45° chamfer both ends; Magnavox part/dwg 118404–2 p/o A101	

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
MP115		PIN, GUIDE: SST; 5/8″ lg x 7/32″ diam max; 1/64″ x 45° chamfer one end; 30° chamfer to 1/32″ diam other end; 35 pitch straight knurl to 1/4″ from 45° chamfer end; Magnavox part/dwg 118423–4 p/o A101	
MP116		RETAINER: SST; 7-1/8″ lg x 9/16″ wd x 5/16″ high overall; 9 lances at 90°, 0.843″ apart; Magnavox part/dwg 639179–2 p/o A101	
MP117		Same as MP116 p/o A101	
MP118		STOP: brass rod; 1/4 diam x 19/64″ lg; 0.096″ diam thru hole, 0.166″ diam c'bore 3/32″ deep and 45° chamfer one end; 0.166″ diam c'bore other end to 5/32″ from chamfered end; Magnavox part/dwg 118343–2 p/o Z101	
MP119		SHAFT: SST, 3/8″ diam max x 1-29/64″ lg; 0.219″ diam hole one end; 0.124″ diam shoulder other end; Magnavox part/dwg 118403–2 p/o O104	
MP120		COUPLING: s.s.; 0.125″ diam mtg hole; Magnavox part/dwg 118483–5 p/o O103	
MP121		PIN: stainless steel, 46S8E, class 7 type A; Magnavox part/dwg 118368–4 p/o O103	
MP122		COVER ASSEMBLY: aluminum Magnavox part/dwg 639797–4 p/o A101	
MP125		COVER ASSEMBLY: aluminum, Navy spec. 47A11E; Magnavox part/dwg 639618–8 p/o A101	
MP127		COUPLING: SST; 39/64″ lg x 13/32″ wd x 0.050 thk; 0.250″ diam hole one end; 0.089: diam hole other end; Magnavox part/dwg 639227–4	
MP128		Same as MP120 p/o A126	
MP129		Same as MP121 p/o A126	
MP130		Same as MP101 p/o E135	
MP131		Same as MP101 p/o E135	
MP132		Same as MP118 p/o E135	
MP134		PIN: brass; 33/64″ lg x 1/4″ diam max; 0.106″ diam hole, 3/32″ deep one end; 0.145″ diam 0.109″ lg; 1/4″ diam flange 0.020″ lg; 0.093″ diam to other end; 1/64″ x 45° chamfer; Magnavox part/dwg 118353–2 p/o E135	
MP135		COVER ASSEMBLY: aluminum, Navy spec 47A11E; Magnavox part/dwg 639618–1 p/o A115	
MP137		STRAP: copper material per Navy spec 47C2F; Magnavox part/dwg 639670–2 p/o A115	(See figure 1–3)
MP139		Same as E183 p/o A119	
MP140		Same as MP139 p/o A119	
MP141		Same as MP139 p/o A119	
MP142		Same as MP139 p/o A119	
MP143		Same as MP120 p/o A151	
MP144		Same as MP121 p/o A151	
MP145		COVER ASSEMBLY: aluminum; Navy spec 47A11E; Magnavox part/dwg 639618–2 p/o A121	
MP146		Same as MP134 p/o Z101	

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
0101	1	LINK: brass; 21/32 in. lg x 7/32 in wd x 0.052 in. thk; 5/32 in. radius both ends; 0.093 in. slot, 0.312 in. lg, 3/8 in. from one end; Magnavox part/dwg 639296-2 p/o Z101	Transfer link, Antenna Circuit (See figure 6-44)
0102		Same as 0101 p/o Z101	Transfer link, Antenna Circuit (See figure 6-44)
0103		Same as A126 p/o A101	Coupling for 0104
0104		Same as A127 p/o A101	
0105	1	CAM: operates 0.104; SS; off ctr. round cylinder shape; 0.343" lg x 9/16" wd x 0.507" h o/a; mts by 0.2187" diam axial hole; has 9/16" OD for 160 deg approx, has 0.492" OD for approx 190 deg; two #4-40 tap radial set screw holes spaced 90 deg apart in ctr of greater OD and 0.093" from one side, other side of same OD has ctr cutout 0.094" wd x 5/32" d to mtg hole; Magnavox part/dwg 118421-2 p/o A101	Actuates 0106
0106	2	LEVER: switch actuator; SS; 1-1/4" lg x 9/16" wd x 25/32" h o/a approx; mts by two #2-56 x 1/2" lg round head machine screws spaced 0.375" c to c; oil impr bronze roller; oper force 10 oz max, release force 2 oz min; movement differential 1/32" max; overtravel 1/64" min; Magnavox part/dwg 437815-1 p/o A101	Actuates S102
R101	2	RESISTOR, FIXED: comp; MIL type RC20GF222J; 2200 ohms p/m 5%; 1/2 w; spec MIL-R-11A; Magnavox part/dwg 237814-167 p/o A101	Antenna Input Divicder, T101 (See figure 6-31)
R102	2	RESISTOR, FIXED: comp; JAN type RC20GF122J; 1200 ohms p/m 5%; 1/2 w; Magnavox part/dwg 237814-161 p/o A101	Antenna Input Divider, T102 (See figure 6-31)
R103	2	RESISTOR, FIXED: comp; JAN type RC20GF471J; 470 ohms p/m 5%; 1/2 w; Magnavox part/dwg 237814-151 p/o A101	Antenna Input Divider, T103 (See figure 6-31)
R104	2	RESISTOR, FIXED: comp; JAN type RC20GF221J; 220 ohms p/m 5%; 1/2 w; Magnavox part/dwg 237814-143 p/o A101	Antenna Input Divider, T103 (See figure 6-31)
R105		RESISTOR, FIXED: comp; JAN type RC20GF121J; 120 ohms p/m 5%; 1/2 w; Magnavox part/dwg 237814-137 p/o A101	Antenna Input Divider, T104 (See figure 6-31)
R106	2	RESISTOR, FIXED: comp; JAN type RC20GF225J; 2.2 meg. p/m 5%; 1/2 w; Magnavox part/dwg 237814-239 p/o A101	Antenna Input Bleeder, Antenna Unit (See figure 6-31)
R107		RESISTOR, FIXED: comp; JAN type RC20GF104J; 100,000 ohms p/m 5%; 1/2 w; Magnavox part/dwg 237814-207 p/o A101	Grid Resistor for V101 (See figure 6-31)
R108		RESISTOR, FIXED: comp; JAN type RC20GF271J; 270 ohms p/m 5%; 1/2 w; Magnavox part/dwg 237814-145 p/o Z101	Cathode Resistor for V101 (See figure 6-44)
R109		RESISTOR, FIXED: comp; MIL type RC20GF472J; 4700 ohms p/m 5%; 1/2 w; spec MIL-R-11A; Magnavox part/dwg 237814-175 p/o Z101	Screen Decoupling for V101 (See figure 6-44)
R126		Same as R107 p/o A115	Grid Bias for V126 (See figure 6-32)
R127		Same as R108; p/o Z126	Cathode Resistor, V126 (See figure 6-45)
R128		Same as R109; p/o Z126	Screen Decoupling Resistor, V126 (See figure 6-45)
R129	2	RESISTOR, FIXED: comp; JAN type RC20GF473J; 47,000 ohms p/m 5%; 1/2 w; spec JAN-R-11; Magnavox part/dwg 237814-199 p/o A115	Bias Network, V126 (See figure 6-32)
R130	2	RESISTOR, FIXED: comp; JAN type RC20GF683J; 68,000 ohms p/m 5%; 1/2 w; spec JAN-R-11; Magnavox part/dwg 237814-203 p/o A115	Bias Return, V126 (See figure 6-32)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
R131	2	RESISTOR, FIXED: comp; MIL type RC20GF823J; 82,000 ohms p/m 5%; 1/2 w; spec MIL–R–11A; Magnavox part/dwg 237814–205 p/o Z126	Voltage Divider Manual Gain Control (See figure 6–45)
R151	2	RESISTOR, FIXED: comp; JAN type RC20GF101J; 100 ohms p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–135 p/o A121	Loading Resistor, T153 Primary (See figure 6–33)
R152		Same as R103 p/o A121	Loading Resistor, T154 Primary (See figure 6–33)
R153		Same as R108 p/o A121	
R154	2	RESISTOR, FIXED: comp; JAN type RC20GF273J; 27,000 ohms p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–193; p/o Z151	#3 Grid Leak, V151 (See figure 6–46)
R155		Same as R103 p/o Z151	(See figure 6–46)
R156		Same as R101; p/o Z151	Screen Decoupling Resistor, V151 (See figure 6–46)
S101	3	SWITCH, ROTARY: 6 pole, 6 position, 6 throws; two sect; 2 amp, 500 v peak; Magnavox part/dwg 167902–1 p/o A101	Band Switch, Antenna Tuning Unit (See figure 6–31)
S102	3	SWITCH, SENSITIVE: SPDT; 125 to 250 v AC, 5 amp; Microswitch Cat #18MZ; spec MIL–S–6743; Magnavox part/dwg 167899–1 p/o A101	Switches C102 (See figure 6–31)
S126	3	SWITCH, ROTARY: 6 pole, 6 position, 6 throws; two sect; 2 amp, 500 v peak; same as N17–S–65233–6617 except wafers contacts are 180 deg out of phase; Magnavox part/dwg 167902–3 p/o A115	Band Switch, RF Unit (See figure 6–32)
S151		Same as S126 p/o A121	Band Switch, Mixer Unit (See figure 6–33)
T101	3	COIL, RF: antenna transformer; 20 kc; two wnd; melamine filled glass tubing, powdered iron core and shell; Magnavox part/dwg 367980–1 p/o A101	Antenna Transformer, Band 1 (See figure 6-31)
T102	3	COIL, RF: antenna transformer; 40 kc; two wnd; melamine filled glass tubing, powdered iron core and shell; Magnavox part/dwg 367980–2 p/o A101	Antenna Transformer, Band 2 (See figure 6–31)
T103	3	COIL, RF: antenna transformer; 100 kc; two wnd; melamine filled glass tubing, powdered iron core and shell; Magnavox part/dwg 367980–3 p/o A101	Antenna Transformer, Band 3 (See figure 6–31)
T104	3	COIL, RF: antenna transformer; 200 kc; two wnd; melamine filled glass tubing, powdered iron core and shell; Magnavox part/dwg 367980–4 p/o A101	Antenna Transformer, Band 4 (See figure 6–31)
T105	3	COIL, RF: antenna transformer; 400 kc; two wnd; melamine filled glass tubing, powdered iron core and shell; Magnavox part/dwg 367980–5 p/o A101	Antenna Transformer, Band 5 (See figure 6–31)
T126	3	COIL, RF: RF transformer; 20 kc; two wnd; bakelite coils, powdered iron core and shell; Magnavox part/dwg 367980–6 p/o A115	RF Transformer, Band 1 (See figure 6–32)
T127	3	COIL, RF: RF transformer; 40 kc; two wnd; bakelite coils, powdered iron core and shell; Magnavox part/dwg 367980–7 p/o A115	RF Transformer, Band 2 (See figure 6–32)
T128	3	COIL, RF: RF transformer, 0.100 mc; two wnd; bakelite coils, powdered iron core and shell; Magnavox part/dwg 367980–8 p/o A115	RF Transformer, Band 3 (See figure 6–32)
T129	2	COIL, RF: RF transformer, 200 kc; two wnd; bakelite coils, powdered iron core and shell; Magnavox part/dwg 367980–9 p/o A115	RF Transformer, Band 4 (See figure 6–32)
T130	2	COIL, RF: RF transformer, 400 kc; two wnd; round bakelite coils, powdered iron core and shell; Magnavox part/dwg 367980–10 p/o A115	RF Transformer, Band 5 (See figure 6–32)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
T151	2	COIL, RF: mixer transformer, 20 kc; two wnd; bakelite coils, powdered iron core and shell; Magnavox part/dwg 367980–11 p/o A121	Mixer Transformer, Band 1 (See figure 6–33)
T152	2	COIL, RF: mixer transformer, 40 kc; two wnd, bakelite coils, powdered iron core and shell; Magnavox part/dwg 367980–12 p/o A121	Mixer Transformer, Band 2 (See figure 6–33)
T153	2	COIL, RF: mixer transformer 0.100 mc; two wnd; bakelite coils powdered iron core and shell; Magnavox part/dwg 367980–13 p/o A121	Mixer Transformer, Band 3 (See figure 6–33)
T154	2	COIL, RF: mixer transformer 200 kc; two wnd; round aluminum can; bakelite coils, powdered iron core and shell; Magnavox part/dwg 367980–14 p/o A121	Mixer Transformer, Band 4 (See figure 6–33)
T155	2	COIL, RF; mixer transformer, 400 kc; two wnd; bakelite coils, powdered iron core and shell; Magnavox part/dwg 367980–15 p/o A121	Mixer Transformer, Band 5 (See figure 6–33)
V101	3	TUBE, ELECTRON: JAN 5899; sub-miniature pentode; p/o Z101	Antenna Unit Amplifier (See figure 6–44)
V126		Same as V101; p/o Z126	RF Unit Amplifier (See figure 6–45)
V151		TUBE, ELECTRON: JAN 5636, sub-miniature pentode mixer; p/o Z151	Mixer (See figure 6–46)
W101	1	BAR, BUS: copper strip, 2-9/16″ lg x 11/32″ wd x 9/16″ h x 0.0201″ thk; LH; Magnavox part/dwg 639315–4 p/o A101	Connects E101 to Circuit Wiring (See figure 6–31)
W102	1	BAR, BUS: 2-1/8″ lg x 1/2″ wd x 57/64″ h x 0.0201″ thk; LH; Magnavox part/dwg 639336–4 p/o A101	Connects E102 to Circuit Wiring (See figure 6–31)
W126	1	BAR, BUS: copper strip, 2-9/16″ lg x 11/32″ wd x 9/16″ h x 0.0201″ thk; RH; Magnavox part/dwg 639315–2 p/o A115	Connects E126 to Circuit Wiring (See figure 6–32)
W127	1	BAR, BUS: 2-1/8″ lg x 1/2″ wd x 57/64″ h x 0.0201″ thk; RH; Magnavox part/dwg 639336–2 p/o A115	Connects E127 to Circuit Wiring (See figure 6–32)
W151		Same as W126 p/o A121	Connects to E151 to Circuit Wiring (See figure 6–33)
W152		Same as W127 p/o A121	Connects E152 to Circuit Wiring (See figure 6–33)
Z101		AMPLIFIER SUBASSEMBLY: part of antenna r-f preamplifier stage; c/o 4 capacitors, 1 electron tube JAN 5899, and 2 resistors mounted on a terminal board; plug-in mounting; 15/16″ thk x 1-1/2″ wd x 3″ lg overall dim.; Magnavox part/dwg 188025–1	Antenna r-f preamplifier plug-in board (See figure 6–44)
Z126		AMPLIFIER SUBASSEMBLY: part of r-f amplifier stage; c/o 1 capacitor, 1 electron tube JAN 5899, and 3 resistors mounted on a terminal board; plug-in mounting 15/16″ thk x 1-1/2″ wd x 3″ lg overall dim.; Magnavox part/dwg 188026–1	R-F amplifier plug-in board (See figure 6–45)
Z151		FREQUENCY MIXER STAGE SUBASSEMBLY: p/o mixer stage; c/o 2 capacitors, 1 electron tube JAN 5636A, and 3 resistors mounted on a terminal board; plug-in mounting; 15/16″ thk x 1-1/2″ wd x 3″ lg overall dim.; Magnavox part/dwg 188027–1	Mixer plug-in board (See figure 6–46)
A201		Same as A126 p/o A205	
A202		SHAFT ASSEMBLY: c/o 1 coupling, 1 shaft; Magnavox part/dwg 118448–2 p/o A205	with A201, drives S201
A205		OSCILLATOR UNIT ASSEMBLY: Magnavox part/dwg 707955–1 p/o A002	(See figure 1–3)
A208		COVER ASSEMBLY: beryllium copper 1/4 H; Magnavox part/dwg 639595–5 p/o A205	Bottom cover plate for Oscillator Unit Assembly
A240		COUPLING ASSEMBLY: c/o 1 bellows, 1 bushing, 1 shaft, brass; Magnavox part/dwg 710391–3 p/o A002	Drives Antenna Comp C103

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
A246		SPRING ASSEMBLY: Beryllium copper; Magnavox part/dwg 639412–3 p/o 0269	Mirror Support
A247		Same as A246 p/o 0269	Mirror Support
A259	1	COVER: main frame channel cover; c/o one cover, one insulation strip; phosphor bronze, white nickel pl; "U" shape; 5-3/16″ lg x 1-7/8″ wd x 7/8″ h o/a approx; two 0.173″ diam mtg holes on 3-1/8″ mtg/c; one "U" shape and two rectangular shape notches in one side, one "U" shape and three rectangular notches in other side; Magnavox part/dwg 639479–1 p/o A002	Covers Chassis Wiring (See figure 6–28)
A260	1	COVER: main frame channel cover; c/o one cover, one insulation strip; phosphor bronze, white nickel pl; "U" shape; 4-15/32″ lg x 1-7/8″ wd x 7/8″ h o/a approx; two 0.173″ diam holes on 2-3/4″ mtg/c; three grounding and one mtg tab on one end; two "U" shape and one rectangular shape notches in one side; one "U" shape and three rectangular shape notches in other side; Magnavox part/dwg 639438–2 p/o A002	Covers Chassis Wiring (See figure 6–28)
C201	3	CAPACITOR, FIXED: mica dielectric; 600 mmf p/m 1%; 500 vdcw; temp coef 0, (tol −0 to +50) mmf/mf/°C; capacitance drift shall not exceed 0.05% p/m 0.1 mmf; Magnavox part/dwg 257818–40 p/o A205	Series Padder for L205/C251A (See figure 6–34)
C202	3	CAPACITOR, FIXED: ceramic dielectric; 36 mmf p/m 2%; 500 vdcw; temp coef 0 ±15% tol; polystyrene lacquer coated; Magnavox part/dwg 257903–21 p/o A205	Compensating Capacitor, L205 (See figure 6–34)
C203	3	CAPACITOR, FIXED: ceramic dielectric; 12 mmf p/m 5%; 500 vdcw; neg temp coef 150 (tol ±15) mmf/mf/°C; polystyrene lacquer coated; Magnavox part/dwg 257903–25 p/o A205	Tunes L205 (See figure 6–34)
C204		Same as C128 p/o A205	Variable Trimmer L205 (See figure 6–34
C205	3	CAPACITOR, FIXED: mica dielectric; 906 mmf p/m 1%; 500 vdcw; temp coef 0 (tol −0 to +50) mmf/mf/°C; capacitance drift shall not exceed 0.05% p/m 0.1 mmf; Magnavox part/dwg 257818–41 p/o A205	Series Padder for L204/C251 (See figure 6–34)
C206	3	CAPACITOR, FIXED: ceramic dielectric; 22 mmf p/m 2%; 500 vdcw; neg temp coef 150 (tol ±15) mmf/mf/°C; Magnavox part/dwg 257903–17 p/o A205	Compensating Capacitor L204 (See figure 6–34)
C207	3	CAPACITOR, FIXED: ceramic dielectric; 13 mmf p/m 2%; 500 vdcw; temp coef 0 (tol ±15) mmf/mf/°C; Magnavox part/dwg 257903–20 p/o A205	Compensating Capacitor for L204 (See figure 6–34)
C208		Same as C204 p/o A205	Variable Trimmer L204 (See figure 6–34)
C209	3	CAPACITOR, FIXED: mica dielectric; 220 mmf p/m 1%; 500 vdcw; temp coef 0, (tol −0 to +40) mmf/mf/°C; capacitance drift shall not exceed 0.05% p/m 0.1 mmf; Magnavox part/dwg 257818–42 p/o A205	Series Padder for L203/C251A (See figure 6–34)
C210	3	CAPACITOR, FIXED: ceramic dielectric; 24 mmf p/m 2%; 500 vdcw; neg temp coef 220 (tol ±33) mmf/mf/°C; polystyrene lacquer coated; Magnavox part/dwg 257903–26 p/o A205	Compensating Capacitor for L203 (See figure 6–34)
C211	3	CAPACITOR, FIXED: mica; 100 mmf p/m 1%; 500 vdcw; temp coef −0 to +40 mmf/mf/°C; capacitance drift 0.05% max; Magnavox part/dwg 257818–30 p/o A205	Compensating Capacitor L203 (See figure 6–34)
C212		Same as C204 p/o A205	Variable Trimmer L203 (See figure 6–34)
C213		Same as C210 p/o A205	Compensating Capacitor, L202 (See figure 6–34)

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
C214	3	CAPACITOR, FIXED: mica dielectric; 162 mmf p/m 1%, 500 vdcw; temp coef 0, (tol −0 to +40) mmf/mf/°C; capacitance drift shall not exceed 0.05% p/m 0.1 mmf; Magnavox part/dwg 257818-37 p/o A205	Series Padder for L202 (See figure 6-34)
C215	3	CAPACITOR, FIXED: mica dielectric; 200 mmf p/m 1%; 500 vdcw; temp coef 0, (tol −0 to +40) mmf/mf/°C; capacitance drift shall not exceed 0.05% p/m 0.1 mmf; Magnavox part/dwg 257818-39 p/o A205	Fixed Trimmer, L202 (See figure 6-34)
C216		Same as C204 p/o A205	Variable Trimmer, L202 (See figure 6-34)
C217	3	CAPACITOR, FIXED: mica dielectric; 183 mmf p/m 1%; 500 vdcw; temp coef 0, (tol −0 to +40) mmf/mf/°C; capacitance drift shall not exceed 0.05% p/m 0.1 mmf; Magnavox part/dwg 257818-38 p/o A205	Series Padder, L201/C251A (See figure 6-34)
C218	3	CAPACITOR, FIXED: ceramic dielectric; 20 mmf p/m 2%; 500 vdcw; neg temp coef 470 (tol ±40) mmf/mf/°C; polystyrene lacquer coated; Magnavox part/dwg 257903-22 p/o A205	Compensating Capacitor, L201 (See figure 6-34)
C219	3	CAPACITOR, FIXED: mica dielectric; 120 mmf p/m 1%; 500 vdcw; temp coef 0 to +40 parts/million/°C; capacitance drift must not exceed 0.05% ±0.1 mmf; Magnavox part dwg 257818-36 p/o A205	Fixed Trimmer, L201 (See figure 6-34)
C220		Same as C204 p/o A205	Variable Trimmer, L201 (See figure 6-34)
C223	3	CAPACITOR, FIXED: mica; 470 mmf p/m 5%; 300 vdcw; characteristic E; 1/2″ lg x 9/32″ wd x 3/16″ thk; Magnavox part/dwg 257853-28; p/o Z-201	Grid Bias Capacitor, V201 (See figure 6-47)
C224	3	CAPACITOR, FIXED: paper dielectric; single sect; 2700 mmf p/m 10%; 300 vdcw max at 85 °C; Pokar impr; Sprague Type 75P27293; Magnavox part/dwg 257805-23 p/o Z201	Screen Bypass, V201 (See figure 6-47)
C225		Same as C162; p/o Z201	Plate Supply Bypass, V201 (See figure 6-47)
C226		Same as C106; p/o Z201	Output Coupling, V201 Plate (See figure 6-47)
C227		Same as C101; p/o Z201	Heater Bypass, V201 (See figure 6-47)
C251	3	CAPACITOR, VARIABLE: air dielectric; plate meshing type; 4 sect; c/o C251-A, C251-B, C251-C, C251-D; 16 mmf to 303 mmf per sect; 230 v RMS test v; SLC; extension shaft adj; 31 plates ea sect; front sect steel, silver pl, other sect brass, silver pl; 187 deg clockwise rotation; ceramic ins; ea sect shielded from all other sects; all sect sealed against liquids and gases for a differential up to p/m 3 psi; Magnavox part/dwg 267815-1 p/o A002	Gang Tuning Capacitor Receiver (See figure 6-43)
C252	3	CAPACITOR, FIXED: metallized paper; single sect; 4 mf p/m 20%; 150 vdcw; Magnavox part/dwg 257900-4 p/o A002	Heater Circuit Filter (See figure 6-43)
C253		Same as C227 p/o A002	Manual Gain Circuit Bypass (See figure 6-43)
C254	2	CAPACITOR, FIXED: paper dielectric; single sect; 100,000 mmf p/m 10%; 200 vdcw; Sprague Type 5P81PA2FC104K; Magnavox part/dwg 257910-14 p/o A002	Plate Supply Bypass (See figure 6-43)
E201		Same as E101 p/o A205	Oscillator Unit Connection to C251A (See figure 6-34)
E202		Same as E201 p/o A205	Oscillator Unit Connection to C251A (See figure 6-34)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
E203	1	BOARD, TERMINAL: general purpose; five brass, post type hot solder dipped term; two brass, solder dipped solder lug term; five post type term irregularly spaced; two solder lug type term 13/32″ c to c; lam glass cloth, silicone resin board; 1-13/16″ lg x 21/32″ wd x 17/32″ thk; mtd by two #4–40 self-clinching nuts on 0.375″ mtg/cw/ integral bkt; marked C222, C217, C221, Magnavox part/dwg 208098–1 p/o A205	Supports Capacitors (See figure 6–34)
E204	1	BOARD, TERMINAL: eight brass rod short term lugs hot solder dip finish; one row of term ctrs 1/8″ from edge of board, first term ctr 1/8″ from end of board then c to c (1) to (2) 0.906″ (3) 1.406″ (4) 2.468″ (5) 2.968″ (6) 3.875″, two other term w/ctrs in line with (1) and (2) 0.281″ from edge of board; lam glass cloth, silicone resin board; 4-1/8″ lg x 13/32″ wd x 7/32″ d o/a; five mtg holes 0.073″ diam 0.781″ c to c w/ 1/2″ at ea end, first hole 0.130″ diam 82 deg csk; mark in four places as shown on dwg with 1/16″ high std characters satin black synthetic C209, C215, C205, C201, river term in place; Magnavox part/dwg 208161–3 p/o A205	Supports Capacitors (See figure 6–34)
E210	1	BOARD, TERMINAL: lam glass cloth, silicone resin; incl 18 stud type and two solder lug type term; w/o barriers; 3″ lg x 1-7/16″ wd x 15/16″ h o/a; mtd by two term pins at one end in corners 0.093″ diam. 1.156″ c to c; 0.328″ lg projecting; w/shield mount and grounding straps; Magnavox part/dwg 208210–1; p/o Z–201	Foundation for Z201 (See figure 6–47)
E251	1	BOARD, TERMINAL: general purpose; two combination screw and solder lug type term; 7/16″ between ctrs; lam glass cloth, silicone resin board; 1-11/16″ lg x 5/8″ wd x 11/16″ thk o/a approx; two 0.136 diam mtg holes on 1.312″ mtg/c; screws are swaged to prevent removal; Magnavox part/dwg 208095–1	Connects Dial Lamp Wiring (See figure 6–43)
E252	1	BOARD, TERMINAL: general purpose; six post type term; term 1/2″ between ctrs, two rows spaced 0.312″ c to c; lam phenolic board; 1/16″ thk, type ITS–E–4 in JAN–P–13; 2-5/16″ lg x 3/4″ wd x 7/16″ thk o/a approx; two 0.156″ diam mtg holes 1.875″ c to c; term linked together in pairs; Magnavox part/dwg 208125–1	Supports Wiring (See figure 6–43)
E253	1	BOARD, TERMINAL: general purpose; six solder post type term; irregularly spaced; lam glass cloth, silicone resin board; 2-11/16″ lg x 29/32″ wd x 1-9/32″ thk o/a approx; one 0.156″ diam mtg hole in ea of two bkts on 2.312″ mtg/c; one 0.261″ diam hole centrally located 19/32″ from one end, marked C253, C254, L251; Magnavox part/dwg 208139–1	Supports Capacitors and Coil (See figure 6–43)
E256	1	BOARD, TERMINAL: 14 stud type term, solder post; 7/32″ c to c; lam glass cloth, silicone resin board; 2-5/8″ lg x 1″ wd x 15/64″ thk o/a approx, two mtg holes #6–32 tap on 2-3/16″ mtg/c, marked w/R–253, R–255, R–254, R–260 and R–259; Magnavox part/dwg 208137–1	Supports Resistors (See figure 6–43)
E257	1	TERMINAL, STUD: post type; brass rod, silver pl; 3/8″ lg x 3/16″ diam; mts by #4–40 tap x 5/32″ diam; undercut 3/32″ lg x 0.093″ diam w/head 0.032″ thk x 0.156″ diam tapped end has 35 pitch knurl, approx 18 points; Magnavox part/dwg 208182–2	Wiring Connection to Chassis (See figure 6–43)
E260		Same as E257	Wiring Connection to Chassis (See figure 6–43)
E261		Same as E257	Wiring Connection to Chassis (See figure 6–43)
E262		TERMINAL, STUD: post type; brass rod, hot solder dip; 11/16″ lg x 1/4″ wd across flats of hex head; mts by #6–32 thd x 11/32″ lg; stud portion 11/32″ lg w/ two heads 0.156″ diam x 0.032″ wd separated by undercut 3/32″ lg x 0.093″ diam, second undercut is 0.140″ lg x 0.093″ diam extends to hex head which is 0.046″ thk; Magnavox part/dwg 208114–2	Wiring Connection to Chassis (See figure 6–43)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
E263		Same as E257	Wiring Connection to Chassis (See figure 6–43)
E264		Same as E257	Wiring Connection to Chassis (See figure 6–43)
E265		Same as E262	Wiring Connection to Chassis (See figure 6–43)
E266		Same as E262	Wiring Connection to Chassis
E267		Same as E262	Wiring Connection to Chassis (See figure 6–43)
E268		Same as E262	Wiring Connection to Chassis
E269		Same as E262	Wiring Connection to Chassis
E273	5	KNOB: round; molded black phenolic; for 1/4″ diam shaft; double #6–32 set screw; 1/32″ wd groove filled w/ white lacquer on pointer; 13/16″ diam x 9/16″ h; brass insert; 7/16″ d shaft hole; integral pointer 3/64″ lg on periphery; eight equally spaced indents for finger grip; Magnavox part/dwg 147844–2	Actuates Frequency Vernier
E274	1	KNOB: round w/ eight equally spaced indents around knob w/ bar extending 1/2″ beyond periphery; black molded thermosetting plastic; for 1/4″ diam shaft; double #8–32 set screw; marked w/ white line 1/32″ wd; 1-5/8″ lg x 1-1/16″ diam x 7/8″ h; brass insert; 3/4″ d shaft hole; ctb 7/16 d x 5/8″ diam; Magnavox part/dwg 147849–2	Actuates Reception Control (See figure 3–1)
E275		Same as E262	Wiring Connection to Chassis (See figure 6–43)
E276		Same as E262	Wiring Connection to Chassis (See figure 6–43)
E277		Same as E257	Wiring Connection to Chassis (See figure 6–43)
E280		Same as E257	Wiring Connection to Chassis (See figure 6–43)
E281	1	ADAPTER, SHAFT: for connecting 0.191″ diam shaft to 1/4″ OD hole; brass, hot solder finish; hollow tube shape w/ centrally located collar 3/8″ lg x 9/32″ OD; has 0.191″ ID hole, one end 0.240″ OD w/ four equally spaced slots has 5/16″ OD x 5/32″ wd ctr shoulder other end 0.240″ OD; Magnavox part/dwg 118430–2 p/o A002	Adapts Coaxial Cable RG–122/U to J464 (See figure 6–43)
E282	5	INSULATOR, BUSHING: tubular; lam phenolic tubing (Fed spec HH–P–256 Type 1 Grade XX); 5/8″ lg; voltage not rated; 0.156″ ID; ends chamfered 45 deg; Magnavox part/dwg 448332–1	Adapts Coaxial Cable RG–122/U to J264 (See figure 6–43)
E283	5	KNOB: round; black phenolic; for 1/4″ diam shaft; double #6–32 set screw; 1/32″ wd groove filled w/white lacquer on pointer; 13/16″ diam x 9/16″ h brass insert; 7/16″ d shaft hole; integral pointer 3/64″ lg on periphery; two sides flatted parallel to pointer; Magnavox part/dwg 147844–4 p/o A002	Knob for "Tuning Meter"
E284		Same as E273 p/o A002	Actuates Ant. Comp. (See figure 3–1)
E285		Same as E273 p/o A002	Actuates RF Gain (See figure 3–1)
E286		Same as E273 p/o A002	Actuates Phone Level (See figure 3–1)
E287		Same as E273 p/o A002	Actuates output control (See figure 3–1)
E288		Same as E283 p/o A002	Knob for output meter range switch

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
H203		Same as H103	Spacer for E201
H204		Same as H104	Spacer for E201
H255		STUD: Stainless steel, Navy Spec 46S18C class 7 Type-A, headed, 1/4-20 thread; Magnavox part/dwg 118487–3	Secures J263
H258	5	WASHER, SPRING: phosphor bronze, spring temper, nickel pl; round, 0.260″ ID x 7/16″ OD x 1/16″ thk, matl 0.010″ thk; Magnavox part/dwg 108327–204	Grounding for C251
H260	1	EXTRACTOR, LAMP: molded synthetic rubber; round tapered plug shape; 2-1/2″ lg x 23/32″ diam at one end, 15/32″ diam at other end; 9/16″ max diam x 9/16″ lg tapered cup in large end, 3/8″ max diam x 13/16″ d tapered cup in small end; Magnavox part/dwg 437816–1	Install and Remove Dial Lamps
H261	3	WRENCH: double end hex type; 3/32″ across flats; 2-3/16″ lg x 27/32″ wd x 3/32″ thk o/a; steel cad pl finish; 90 deg offset; "L" shaped handle, hex rod; for #10 and #12 set screws; Allen Mfg. Code #332; Magnavox part/dwg 807972–5006	Repair and Maintenance Use
H262	3	WRENCH: double end hex type; 5/64″ max wd across flats; 2-3/64″ lg x 25/32″ wd x 5/64″ thk o/a; steel, cad pl finish; 90 deg offset; "L" shaped handle hex rod; for #8 Allen set screw and #4 cap screw; Allen Mfg Code #564; Magnavox part/dwg 807972–5005	Repair and Maintenance Use
H263	3	WRENCH: double end hex type; 1/16″ max across flats; 1-29/32″ lg x 23/32″ wd x 1/16″ d o/a; steel, cad pl finish; 90 deg offset; "L" shaped handle, hex rod; for #6 set screws and #2 cap screw; Allen Mfg short series; Magnavox part/dwg 807972–5004	Repair and Maintenance Use
H264	3	WRENCH: double end hex type; 0.050″ max across flats; 1-29/32″ lg x 25/32″ wd x 0.050″ thk o/a; steel, cad pl finish; 90 deg offset; "L" shaped handle hex rod; for #4 Allen set screw; Magnavox part/dwg 807972–5003	Repair and Maintenance Use
H265	3	TOOL, ALIGNMENT: fiber; 7″ lg x 7/32″ diam o/a; screwdriver on one end 7/32″ wd x 0.025″ thk; screwdriver opposite end 0.125″ wd x 0.015″ thk; 0.198″ x 7/16″ lg under-cut located 5-11/32″ from end; 2″ x 0.198″ under-cut on one end; moisture and fungus resistance; Magnavox part/dwg 807855–1	Alignment and Adjustment
H266	3	TOOL, ALIGNMENT: lam phenolic tubing; 1.296″ lg x 0.218″ diam o/a; 0.046″ h x 0.218″ wd x 0.040″ thk screwdriver one end; 7/16″ lg x 0.198″ diam under-cut located near one end; moisture and fungus resistant; Magnavox part/dwg 807854–1	Alignment and Adjustment
H298		WASHER SPRING: Phosphor bronze, 0.010 in. thk., 3/8 in. dia, 0.045 in. overall height; Magnavox part/dwg 108799–226	Friction device for tilt assembly (See figure 1–2)
H299		Same as H255	Pivot stud for tilt release (See figure 1–2)
I251	3	LAMP, GLOW: 65 v AC, 90 v DC starting; bulb T–3-1/4 clear; 1-3/16″ lg o/a; miniature bayonet base; neon type; burn any position; Mazda Type NE–51; Magnavox part/dwg 187970–9	Indicates "Power On" (See figure 6–43)
J201		Same as J101	Plug-in Connector for Oscillator Unit (See figure 6–34)
J202		Same as J127	Receptacle for Z201 (See figure 6–34)
J203		Same as J103	Receptacle for Z201 (See figure 6–34)
J252	3	CONNECTOR, RECEPTACLE: 11 round female cont, pol; straight type; 1-29/64″ lg x 3/8″ wd x 39/64″ thk o/a; 5 amp, 1000 v peak; rectangular phenolic body; two #4–40 x 1/4″ lg mtg studs on 1.140″ mtg/c; cont silver or gold pl; term hot tin dipped; Magnavox part/dwg 187989–16	Receptacle for Antenna Unit (See figure 6–43)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
J253		Same as J252	Receptacle for RF Unit (See figure 6–43)
J254		Same as J252	Receptacle for Mixer Unit (See figure 6–43)
J255		Same as J252	Receptacle for Oscillator Unit (See figure 6–43)
J256	3	CONNECTOR, RECEPTACLE: three round female cont, pol; straight type; 57/64″ lg x 3/8″ wd x 43/64″ thk max o/a; 5 amp, 1000 v peak; rectangular phenolic body; two #4–40 x 1/4″ lg mtg studs on 0.578″ mtg/c; cont silver or gold pl; term hot tin dipped; Magnavox part dwg 187989–17	Receptacle for 1st IF Unit (Input) (See figure 6–43)
J257	3	CONNECTOR, RECEPTACLE: seven round female cont, pol; straight type; 1-11/64″ lg x 3/8″ wd x 39/64″ thk o/a; 5 amp, 1000 v peak rectangular phenolic body; two #4–40 x 1/4″ lg mtg studs on 0.858″ mtg/c; cont silver or gold pl, term hot tin dipped; Magnavox part/dwg 187989–14	Receptacle for 1st IF Unit (See figure 6–43)
J258		Same as J256	Receptacle for 2nd IF Unit (Input) (See figure 6–43)
J259	3	CONNECTOR, RECEPTACLE: 18 round female cont, pol; straight type; 1-5/16″ lg x 9/16″ wd x 27/32″ d o/a; 3 amp; rectangular plastic body; two #4–40 x 1/4″ lg mtg studs on 1″ mtg/c on term side; term and cont identified by ltrs, cont silver pl; RSW; Winchester Electronics Co., Cat MRE18S–G; Magnavox part/dwg 187991–2	Receptacle for 2nd IF Unit (See figure 6–43)
J260		Same as J259	Receptacle for Audio Unit (See figure 6–43)
J261		Same as J257	Receptacle for BFO Unit (See figure 6–43)
J262		Same as J257	Receptacle for Calibrator Unit (See figure 6–43)
J263	3	CONNECTOR, RECEPTACLE: 18 round female cont, pol; straight type; 2-23/32″ lg x 1-3/32″ wd x 1-1/4″ d; 10 amp; rectangular plastic body; two #6–32 x 3/8″ lg mtg studs on 2-5/32″ mtg/c; term and cont identified by ltrs; Winchester Electronics Co. Cat #QRE18S–2; Magnavox part/dwg 187990–4	Receptacle for Power Unit (See figure 6–43)
J264	3	CONNECTOR, RECEPTACLE: 14 round male cont; straight type; 3-3/8″ lg x 1-11/16″ wd x 1-3/4″ thk; small cont 10 amp; medium cont 15 amp, large (coax) 10 amp; rectangular aluminum body; mica-filled phenolic insert; four 0.152″ diam csk mtg holes on 2-7/8″ x 1″ mtg/c; coax term are 90 deg angular type; Magnavox part/dwg 187981–2	Connector for Main Chassis (See figure 6–43)
J265	2	JACK, TELEPHONE: two cond plug 0.253″ diam; 1-9/32″ lg x 15/16″ wd x 49/64″ h o/a approx; J1 cont arrangement; incl brass hex nut and one brass washer; Magnavox part/dwg 187987–1	Headphone Panel Jack (See figure 6–43)
J266		Same as J265	Headphone Panel Jack (See figure 6–43)
L201	3	COIL, RF: osc tunes 0.082 mc; single wnd having two taps; in phenolic case; powdered iron core; scdr tuning adj; scdr adj at mtg end; BuShips spec 16T36 (Ships); Magnavox part/dwg 367979–1	Oscillator Unit, Band I (See figure 6–34)
L202	3	COIL, RF: osc tunes 0.250 mc; single wnd having two taps; powdered iron core; scdr tuning adj; scdr adj at mtg end; BuShips spec 16T36 (Ships) Magnavox part/dwg 367979–2	Oscillator Unit, Band 2 (See figure 6–34)
L203	3	COIL, RF: osc tunes 0.300 mc; single wnd having two taps; powdered iron core; scdr adj; scdr adj at mtg end; BuShips spec 16T36 grade C Magnavox part/dwg 367979–3	Oscillator Unit, Band 3 (See figure 6–34)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
L204	3	COIL, RF: osc tunes 0.270 mc; single wnd having two taps; powdered iron core; scdr adj; scdr adj at mtg end; BuShips spec 16T36 grade C; Magnavox part/dwg 367979–4	Oscillator Unit, Band 4 (See figure 6–34)
L205	3	COIL, RF: osc tunes 0.700 mc; single wnd having two taps; powdered iron core; scdr adj; scdr adj at mtg end; BuShips spec 16T36 grade C; Magnavox part /dwg 367979–5	Oscillator Unit, Band 5 (See figure 6–34)
L251	3	COIL, RF: choke; single pie universal wnd; shielded; 6.35 mh p/m 10% at 200 kc; wnd directly over powdered iron core; coil sealed in potting compound; in accordance w/ BuShips spec 16T36 grade C; Magnavox part/dwg 367978–7	Manual Gain Control Filter Circuit (See figure 6–43)
L252	3	REACTOR: power inductor; one section; 0.001 henry min at 0.2 v AC; 0.3 ohm max DC resistance; 500 v RMS test; HS metal case; 1-17/32″ lg max x 1-1/2″ wd x 1-3/8″ thk excluding term; two #6–32 x 5/16″ lg mtg studs on 3/4″ mtg/c; two post type term 3/8″ lg on top of case; oper temp −54° C to +85° C; term hot solder dipped, air cooled; spec MIL–T–27 grade 1 class A; Magnavox part/dwg 327857–1	Heater Circuit Filter (See figure 6–43)
MP230		SPRING: 1″ wd x 11/32″ lg x 1/16″ thk; c/o 2 holes 0.102″ diam; Magnavox part/dwg 639380–2 p/o 0269	
MP231		Same as MP230 p/o 0269	
MP233		TRUNNION: 1/8″ wd o/a; 1/16″ wd x 1/4″ diam; Magnavox part/dwg 118359–2 p/o 0269	
MP234		Same as MP233 p/o 0269	
MP235		SPRING: Music wire, cadmium chromatic finish; Magnavox part/dwg 108336–501 p/o 0269	
MP236		PIVOT: 0.156″ wd x 1/4″ lg; 0.55″ diam hole; Magnavox part/dwg 118360–1 p/o A246/A247	
MP237		SPRING: 1/4 hd beryllium copper; 3/4″ wd x 5/16″ lg x 1/16″ thk; 2 mtg holes 0.102″ diam; 1 mtg hole 0.096″ diam; Magnavox part/dwg 639413–1 p/o A246/A247	
MP238		MIRROR: front surface polished plate glass; reflectivity 89%; 1-3/8″ wd x 13/16″ lg x 1/8″ thk; Magnavox part/dwg 437813–1 p/o 0269	
MP241		PUSH ROD ASSEMBLY: c/o spring Magnavox part/dwg 639487–2 and push rod Magnavox part/dwg 639230–2; Magnavox part/dwg 639486–1	Manual Release for 0268
MP246		Same as MP120 p/o A201	
MP247		Same as MP121 p/o A201	
MP248		COVER ASSEMBLY: c/o 2 bushings Magnavox part/dwg 118390–10; cover Magnavox part/dwg 639621–3; Magnavox part/dwg 639618–3 p/o A205	(See figure 1–3)
MP249		Same as MP137 p/o A205	(See figure 6–34)
M251	3	METER, MICROAMMETER: DC; range 0 to 100 ua; sq, molded bakelite flush mtg case; 1.510″ diam barrel 1.000″ d behind flange excluding term; sq flange 1.770″ lg x 1.770″ wd x 0.406″ thk; p/m 3% for full scale reading; resistance 1110 ohms across term; 20 scale divisions; white markings and pointer, black background; four 0.140″ diam mtg holes located on 1.312″ x 1.312″ mtg/c; two solder lug term; special scale markings; Magnavox part/dwg 557807–1	Tuning Meter (See figure 3–1)

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
M252	3	METER, AUDIO LEVEL: AC type, 25 cyc to 16,000 cyc; range −10/0 +5 DB; round, plastic flush-mtg case; 1.770″ sq flange x 1.150″ diam body x 1.000″ d behind flange; p/m 5% accuracy for full scale reading; "0" on scale represents 0.6 v; 5000 to 5500 ohms resistance when indicating "0"; calibrated for use on non-magnetic panel; 10 scale divisions, white markings and pointer, black background, self-contained; four 0.140″ diam holes on 1.312″ x 1.312″ mtg/c; two solder lug term; special scale marking; Magnavox part/dwg 557806-1	Output Meter (See figure 3-1)
N251	5	ESCUTCHEON: Radio Receiver Equipment operation; front panel; half hard aluminum alloy sheet; light Navy gray enamel finish; silk screen, back finish; rectangular w/one irregularly shaped 2-step cutaway corner; 11-55/64″ lg x 7-17/32″ wd x 0.032″ thk o/a; five 0.147″ diam mtg holes, three at cutaway end, ctrs 3/16″ from edges at corners; two towards other end, ctrs 3/16″ from side edges on centerline 9.359″ from centerline of first end holes; marked for meter, switch, and other equipment mtg; two marked A 1.562″ diam, 1 B 0.718″ diam, 3 C 0.500″ diam, 8 D 0.406″ diam, 1 E 0.281″ diam, 17 H 0.147″ diam incl mtg holes; Magnavox part/dwg 157887-6	Carries Panel Markings (See figure 3-1)
N252	5	ESCUTCHEON: used on Freq Vernier; aluminum alloy die casting, light Navy gray enamel finish; rectangular shape; 1-15/16″ lg x 1-11/32″ wd x 0.187″ thk o/a; two 0.173″ diam mtg holes on 1.562″ x 0.968″ mtg/c marked w/10-0-10, Freq Vernier; 0.251″ diam hole located on centerline; Magnavox part/dwg 157900-4	Carries Frequency Vernier Markings (See figure 3-1)
O251	1	GUIDE, PULL BAR: guide for switch actuator bar; SS; flat washer shape w/hub on one side; 7/16″ OD max x 0.171″ ID x 5/32″ thk; 0.342″ OD hub extends 0.098″ beyond face on one side; single 0.171″ diam axial mtg hole; 0.281″ diam x 3/32″ d ctb in side opposite hub; Magnavox part/dwg 118347-2	Retains O252 (See figure 5-9)
O252	4	BAR, SWITCH ACTUATING: Magnavox part/dwg 639265-2	Operates "Reception Control" Switches
O253	4	BAR, SWITCH ACTUATOR: Magnavox part/dwg 639107-4	Operated Band Switches
O254	1	GUIDE, PULL BAR: guide for switch actuator bar; SS; flat washer shape w/hub on one side; 7/16″ OD max x 0.161″ ID x 5/32″ thk; 1/4″ OD hub extends 0.098″ beyond face on one side; single 0.161″ diam axial mtg hole; Magnavox part/dwg 118348-2	Retains O253 (See figure 5-10)
O255	3	GEAR ASSEMBLY: antenna trimmer drive; c/o one bearing (casting), one coupling, one shaft, two gears; 1-9/16″ lg x 1-1/8″ wd x 1-3/16″ h o/a approx; two csk mtg holes 0.156″ diam 0.406″ c to c; 0.156″ lg crank pin 3/16″ off ctr in coupling; Magnavox part/dwg 437804-1	Right Angle Drive for Antenna Unit Trimmer (See figure 5-9)
O256	1	SHAFT: antenna compensator drive; SS; round rod shape; 10-27/32″ lg x 0.250″ +0.001″ −0.002″ diam o/a; mts by one end cut back to 0.125″ p/m 0.002″ diam x 5/16″ lg; other end has 1-64″ x 45 deg chamfer; Magnavox part/dwg 118352-4	Actuates O255 (See figure 5-9)
O257	3	GEAR ASSEMBLY: reception switch drive; c/o one bkt, one spur gear, one shaft, two miter gears, two set screws, two taper pins, four washers, one washer, bronze; irregular shape; 2-1/4″ lg x 1.967″ wd x 1-3/8″ thk mts by one #6-32 tapped hole 3/8″ d w/0.219″ diam x 82 deg csk, two 0.156″ diam clearance holes w/0.219″ diam x 82 deg csk spaced 1.062″ c to c; Magnavox part/dwg 437805-1	Actuates O252 (See figure 5-9)
O258	1	EXTENSION SHAFT: BFO; brass, white nickel finish; round shaft 2″ diam; 11-1/8″ lg x 1/2″ diam o/a; hole drilled axially in large diam end 0.251″ diam x 0.218″ d w/ #6-32 tap radial hole in side and slot 0.055″ wd, 0.145″ d from end 90 deg from radial hole ctr; small diam section 0.250″ diam x 13/16″ lg, 1/64″ x 45 deg chamfer end; Magnavox part/dwg 118406-2	Shaft Extension for Frequency Vernier Control

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
O259	1	BUSHING: panel bearing; brass, white nickel plate; male and female; 1/2″ hex head x 5/16″ lg o/a; Magnavox part/dwg 118428–2	Panel Bearing for O256
O260	1	RECEIVER, SUB-ASSEMBLY: intermediate gear for latch mechanism; c/o one gear, one hub, one plate assem; rectangular shape; 4-7/8″ lg x 1-13/32″ wd x 49/64″ thk o/a approx; Magnavox part/dwg 639273–2	Assists in Mounting O261
O261		HANDLE ASSEMBLY: c/o 1 stationary handle, 1 movable handle, 1 shaft, 1 latch, 1 knob, 1 pin, 2 gears and hardware; L/H Magnavox part/dwg 127804–1 p/o A002	See figure 2–2
O262	1	CATCH FASTENER: c/o one block and guide assem, one gear; rectangular block welded to guide, gear riveted to guide; 1.655″ lg x 1.358″ wd x 0.6827″ h o/a; right-hand side; Magnavox part/dwg 118434–1	Secures Chassis in Cabinet (See figure 1–3)
O263	1	CATCH FASTENER: c/o one guide and block assem, one gear; rectangular block welded to guide, gear riveted to guide; 1.655″ lg x 1.358″ wd x 0.6827″ h o/a; left-hand side; Magnavox part/dwg 118434–2	Secures Chassis in Cabinet (See figure 1–3)
O264	1	PLATE, CATCH: locks chassis in case RH; c/o one catch, one stud, one cable stud; irregular shape; 2-49/64″ lg x 27/32″ wd x 0.639″ h o/a approx; snap ring mtd at groove in studs; catch w/ 3/32″ rad bend 1-5/32″ from end x 0.140″ h, notched 0.265″ d x 0.203″ wd, 1.187″ from ctr line of stud at ctr line of 0.218″ rad end; two studs riveted on same side of catch; Magnavox part/dwg 639276–3	Secures Chassis (See figure 1–3)
O265	1	PLATE, CATCH: locks chassis in case LH; c/o one catch, one stud, one cable stud; irregular shape; 2-49/64″ lg x 27/32″ wd x 0.639″ h o/a approx; snap ring mtd at groove in studs; catch w/ 3/32″ rad bend 1-5/32″ from end x 0.140″ h, notched 0.265″ d x 0.203″ wd, 1.187″ from ctr line of stud at ctr line of 0.218″ rad; two studs riveted on same side of catch; Magnavox part/dwg 639276–4	Secures Chassis (See figure 1–3)
O266	1	Same as MP241	Manual Release for O267
O267	1	PAWL ASSEMBLY: p/o dog assem; c/o one dog stop, one cable stud, one stud; rectangular w/ one end turned on 0.030″ rad extending up 0.218″; 3-1/32″ lg x 22/32″ wd x 0.265″ h; 18/32″ x 1.203″ mtg/c; 0.3775″ diam hole 13/32″ x 1.203″ mtg/c, right side; Magnavox part/dwg 639416–3	To Secure Chassis in Servicing Positions (See figure 1–3)
0268	1	PAWL ASSEMBLY: p/o dog assem; c/o one dog stop, one cable stud, one stud; rectangular w/ one end turned on 0.030″ rad extending up 0.218″; 3-1/32″ lg x 23/32″ wd x 0.265″ h; 13/32″ x 1.203″ mtg/c 0.3755″ diam hole 13/32″ x 1.203″ mtg/c, left side; Magnavox part/dwg 639416–4	Secures Chassis in Servicing Positions (See figure 1–3)
0269	3	MIRROR ASSEMBLY: reflects dial image upon ground glass viewing screen; c/o one mtg bkt, one first surface mirror, one spring assem, one trunnion, one insulator, one frame, one holder; metal parts brass, black nickel pl; 2″ lg x 1-1/8″ wd x 1-1/2″ h o/a approx; two 0.156″ diam mtg holes 1″ c to c; adj screw is provided for adj angle of mirror; Magnavox part/dwg 437818–1	Reflector for Optical Dial System (See figure 2–8)
0270	3	HANDLE: Same as 0261 except R/H P/O A002	Assists in Withdrawing Chassis from Cabinet
0271	1	SPRING: helical compression type; detent spring; 0.032″ diam music wire, cad pl; 9/16″ lg x 0.140″ OD; 10 turns; squared ends; mts by insertion; RH wnd; Magnavox part/dwg 108336–503	Spring Loading for 0272 (See figure 1–3)
0272	3	BALL, POSITIONING: SS; round, 5/32″ diam; mts by insertion; Magnavox part/dwg 102057–9	Detent Ball for "Reception Switch" Operates against 0252
0273	1	SPRING: helical extension type; dog actuator; 0.035″ diam music wire; cad pl; 0.187″ OD x 1-1/16″ lg (free lgth) o/a; approx 25 active turns; parallel hook term; mtd; barrel shape; Magnavox part/dwg 108277–503	Spring Loading for 0264, 0265 (See figure 1–3)

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
O274	1	SPRING: helical extension type; dog actuator; 0.035″ diam music wire; cad pl; 0.250″ OD x 1-7/8″ lg (free lgth) o/a; approx 35 active turns; parallel hook term; term mtd; barrel shape; Magnavox part/dwg 108277-502	Spring Loading for O267, O268 (See figure 1-3)
O275	1	MOUNTING BLOCK: for reception switch detent; brass, white nickel pl finish; rectangular block shape; 11/16″ x 1/2″ h x 1/4″ wd o/a; one larger side has two mtg holes #6-32 tap 0.375″ c to c; one narrow end has single hole 0.152″ diam x 35/64″ d, front end is enlarged to 0.1568″ +0.0006″ −0.0000″ diam x 5/32″ d; Magnavox part/dwg 118369-2	Retains O271, O272
O276	1	GEAR, rack type; SS; straight teeth, 14-1/2 deg pressure angle; 9 teeth; diametral pitch 32; 1-1/2″ lg x 1/2″ max h x 0.093″ wd o/a; straight face; two mtg holes #6-32 tap thd spaced 0.562″ c to c; pitch line parallel to mtg/c line and spaced 0.312″ away; mates w/ spur gear; Magnavox part/dwg 118391-2	Actuates O253
O278	1	RECEIVER, SUB-ASSEMBLY: intermediate gear for latch mechanism; c/o one gear, one hub, one plate; rectangular shape; 4-7/8″ lg x 1-13/32″ wd x 49/64″ thk o/a approx; same as SNSN N16-R-33591-1334, except assembled w/ beveled side of gear on opposite side; Magnavox part/dwg 639273-3	Assists in Mounting O270
O279	1	Same as O251	Retains O252 (See figure 3-1)
O280	1	Same as O251	Retains O252 (See figure 3-1)
O281	4	Same as O254	Retains O253 (See figure 5-10)
O282	4	Same as O254	Retains O253 (See figure 5-10)
O283	4	Same as O254	Retains O252 (See figure 5-10)
R201	2	RESISTOR, FIXED: comp; JAN type RC20GF333J; 33,000 ohms p/m 5%, 1/2 w; spec JAN-R-11; Magnavox part/dwg 237814-195; p/o Z201	Grid Resistor, V204 (See figure 6-47)
R202		Same as R101; p/o Z201	Cathode Resistor V201 (See figure 6-47)
R203		Same as R101; p/o Z201	Plate Supply Decoupling V201 (See figure 6-47)
R204	3	RESISTOR, FIXED: comp; JAN type RC20GF474J; 470,000 ohms p/m 5%, 1/2 w; spec JAN-R-11; Magnavox part/dwg 237814-223 p/o Z201	Screen Dropping V201 (See figure 6-47)
R205		Same as R154; p/o Z201	Plate Load, V201 (See figure 6-47)
R251	3	RESISTOR, VARIABLE: comp; two sect, 10,000 ohms p/m 20% ea sect; 2 w; three solder lug term ea sect; enclosed plastic case 1-1/16″ diam x 1-3/16″ lg; round metal shaft 1/4″ diam x 3/4″ lg; panel unit, 26% resistance at 35% rotation, 10% resistance at 50% rotation, 3% resistance at 65% rotation; rear unit, 30% resistance at 35% rotation, 50% resistance at 50% rotation; 70% resistance at 65% rotation; ins cont arm; w/o off position; normal torque; mtg bushing 3/8″ −32 x 3/8″ lg; non-turn device located on 17/32″ rad at 3 o'clock; RSW; oper temp range −55°C to +85°C; marked w/ Magnavox part/dwg #, 900 v test between term and mtg bushing; fungus proofed; AB type JJBU1032, P3048, Magnavox part/dwg 227834-3	"RF Gain" (Manual) Control (See figure 6-43)
R252		Same as R130	Leg of Voltage Divider to R251 (See figure 6-43)
R253	2	RESISTOR, FIXED: comp; JAN type RC20GF560J; 56 ohms p/m 5%; 1/2 w; spec JAN-R-11; Magnavox part/dwg 237814-129	Multiplier for M251 (See figure 6-43)
R254	2	RESISTOR, FIXED: comp; JAN type RC20GF392J; 3900 ohms p/m 5%; 1/2 w; spec JAN-R-11; Magnavox part/dwg 237814-173	"+10 Db" Multiplier for M252 (See figure 6-43)
R255	2	Same as R102	"0 Db" Multiplier for M252 (See figure 6-43)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
R257	3	RESISTOR, VARIABLE: comp; two sect, 1 meg p/m 10%; 100,000 ohms p/m 20%; 2 w; three solder lug term ea sect; enclosed plastic case 1-1/16″ diam x 1-3/16″ lg; round metal shaft 1/4″ diam x 3/4″ lg; 2% resistance at 35% rotation, 10% resistance at 50% rotation, 26% resistance at 65% rotation; ins cont arm, w/o off position; normal torque; mtg bushing 3/8″ −32 x 3/8″ lg; non-turn device located on 17/32″ rad at 3 o'clock; RSW; oper temp range −55°C to +100°C; marked w/ Magnavox part/dwg #; 900 v test between term and mtg bushing; fungus proofed; AB Type JA1051, 1042, P3048; Magnavox part/dwg 227834–2	"Output" Control (See figure 6–43)
R258	3	RESISTOR, VARIABLE: comp; 50,000 ohms p/m 20%; 2 w; three solder lug term; enclosed plastic case w/ metal cover, 1-1/16″ diam x 9/16″ d; round metal shaft 1/4″ diam x 3/4″ lg from mtg surface, counterclockwise L O G "B", 35% resistance at 35% rotation, 10% resistance at 50% rotation, 3% resistance at 65% rotation; ins cont arm; normal torque; 3/8″—32 x 3/8″ lg mtg bushing; non-turn device located on 17/32″ rad at 3 o'clock; oper temp range −50°C to +100°C, will withstand 1000 v between term and mtg bushing for 1 min; and 100-hr salt spray; term hot tin dipped, marked w Magnavox part/dwg; will withstand acceleration of 8G; AB Type JB5032, P3048; Magnavox part/dwg 227838–2	Headphone Level Control (See figure 6–43)
R259		Same as R255	Headphone Circuit Termination (See figure 6–43)
R260	2	RESISTOR, FIXED: comp; JAN type RC20GF123J; 12,000 ohms p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–185	"+20 Db" Multiplier for M252 (See figure 6–43)
R263	4	P/o X251 (not replaceable)	Neon Bulb Current Limiting
R264	2	RESISTOR, FIXED: comp; JAN type RC20GF621J; 620 ohms p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–154 p/o A002	Multiplier for M252 (See figure 6–43)
S201		Same as S126 p/o A205	Band Switch, Oscillator Unit (See figure 6–34)
S251	3	SWITCH, TOGGLE: DPST; JAN type ST22K; 6 amp continuous oper cap; 5 amp 125 v, 2 amp 250 v resistive load; 3 amp 125 v; 1.5 amp 250 v inductive load, nom ratings; spec JAN–S–23; Magnavox part/dwg 168023–11	Main Power Switch (See figure 6–43)
S252	3	SWITCH, TOGGLE: DPDT; JAN type ST22N; 125 v, 5 amp resistive load; 125 v 3 amp inductive load (AC or DC); spec JAN–S–23; Magnavox part/dwg 168023–1	Turns Calibrator On/Off (See figure 6–43)
S253	3	SWITCH, TOGGLE: SPST; JAN type ST12A; 6 amp continuous oper cap; 5 amp 125 v, 2 amp 250 v resistive load; 3 amp 125 v, 1.5 amp 250 v inductive load, nom ratings; spec JAN–S–23; Magnavox part/dwg 168023–2	Standby Switch (See figure 6–43)
S254	3	SWITCH, ROTARY: SPDT; two position; single sect, spring silver alloy cont on stator solid silver cont on rotor; nylon fabric phenolic wafer, SS or nickel pl brass body; 1-1/4″ diam x 7/8″ lg approx. shorting type cont; momentary action in position #1, locking in position #2, solder lug term, single hole mtg bushing 3/8″ −32 x 3/8″ lg, 1/4″ diam x 23/32″ lg SS shaft ambient oper temp range −54°C to +85°C; marked w/ Oak Type F; Magnavox part/dwg 167889–1	Controls Range of M251 (See figure 6–43)
S255	3	SWITCH, ROTARY: single pole, 4 position 3 throw; single sect; spring silver alloy cont on stator, solid silver cont on rotor; nylon fabric phenolic wafer, SS or nickel pl brass body, 1-1/4″ diam x 7/8″ lg approx; shorting type cont; momentary action in position #1, other position locking action; solder lug term, single hole mt, bushing 3/8″ −32 x 3/8″ lg, 1/4″ diam x 23/32″ lg SS shaft; ambient oper temp range −45°C to +85°C; Oak Type F; Magnavox part/dwg 167901–1	Controls Range of M252 (See figure 6–43)

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
V201	3	TUBE, ELECTRON: JAN5840; sub-miniature pentode; p/o Z201	Local Oscillator (See figure 6-47)
W201		Same as W126; p/o A205	Connects E201 to Circuit Wiring (See figure 6-34)
W202	1	BUS, BAR: copper; rectangular cross section; solid; cross sectional dimen, 1/8" wd w/ 1/4" wd section at end; 0.0201" thk; 2-3/32" lg o/a; 53/64" d; 0.120" diam hole at 1/4" wd end for mtg; w/ hook at one end and mount at other; silver and gold pl finish; Magnavox part/dwg 639336-6; p/o A205	Connects E202 to Circuit Wiring (See figure 6-34)
X251	3	LIGHT, INDICATOR: w /lens; convex lens, clear on the outside and frosted on the inside; incl 100,000 ohm built-in resistor, spec JAN-P-14; Magnavox part/dwg 187966-1	Socket and Lens of I251 (See figure 6-43)
Z201	3	RECEIVER SUB-ASSEMBLY: local osc stage fixed electrical components; c/o five fixed capacitors C-223, C-224, C-225, C-226, C-227, five fixed resistors R-201, R-202, R-203, R-204, R-205, one shield mount E-206, one term E-207, one term board assem E-210, one vacuum tube V-201 Jan-5840; c/o all fixed electrical components used in local osc stage for AN/SRR-11 receiver; rectangular shape; 3" lg x 15/16" h x 1-1/2" wd o/a; mts by two pins 0.093" diam on 1.156" mtg/c; marked w/ symbols; end opposite mtg pins has spring and cap arrangement to secure end using cover lid pressure on spring; Magnavox part/dwg 188028-1	Plug-in Sub-Assembly, Oscillator Unit (See figure 6-47)
A401		CASE ASSEMBLY: Magnavox part/dwg 639492-3	Supports A501
MP405		SPRING, GROUNDING: beryllium copper; 14-13/16" lg; Magnavox part/dwg 639614-2; p/o A401	Grounds Chassis to Case (See figure 1-3)
MP406		Same as MP405; p/o A401	Grounds Chassis to Case (See figure 1-3)
MP407		SPRING, GROUNDING: beyllium copper; 4-11/32" lg; Magnavox part/dwg 639614-4; p/o A401	Grounds Chassis to Case (See figure 1-3)
MP408		Same as MP407; p/o A401	Grounds Chassis to Case (See figure 1-3)
MP409		SPRING, GROUNDING: beryllium copper; 2-5/64" lg; Magnavox part/dwg 639614-6; p/o A401	Grounds Chassis to Case (See figure 1-3)
MP410		Same as MP409; p/o A401	
MP411		PIN: 2-5/16" lg; 1" hd diam; 0.375" shank diam; Magnavox part/dwg 118393-2; p/o A401	Rear Support for Frame Assembly. Engages H2684
MP412		Same as MP411; p/o A401	Rear Support for Frame Assembly Engages H2685
MP413		SPRING, GROUNDING: beryllium copper; 14-13/16" lg; Magnavox part/dwg 639614-8; p/o A401	Ground Chassis to Case
MP414		Same as MP413; p/o A401	
MP415		SPRING, GROUNDING: beryllium copper; 14-13/16" lg; Magnavox part/dwg 63914-10; p/o A401	Ground Chassis to Case (See figure 1-3)
MP416		SPRING, GROUNDING: beryllium copper; 14-13/16" lg; Magnavox part/dwg 639614-12; p/o A401	Grounds frame to case (See figure 1-3)
MP417		SPRING, GROUNDING: beryllium copper; 3-1/2" lg; Magnavox part/dwg 639178-8; p/o A401	Grounds filter assy. A1701 to case
MP418		Same as MP417; p/o A401	Grounds filter assy. A1701 to case
MP419		Same as MP417; p/o A401	Grounds filter assy. A1701 to case
MP420		SPRING, GROUNDING: beryllium copper; 2-31/32" lg; Magnavox part/dwg 639178-12; p/o A401	Grounds filter assy. A1701 to case

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
MP421		Same as MP420; p/o A401	Grounds filter assy. A1701 to case
MP422		SPRING, GROUNDING: beryllium copper; 1-11/16″ lg; Magnavox part/dwg 639178–14; p/o A401	Grounds filter assy. A1701 to case
MP423		Same as MP422; p/o A401	Grounds filter assy. A1701 to case
MP424		SPRING, GROUNDING: beryllium copper; 1-5/16″ lg; Magnavox part/dwg 639178–10; p/o A401	Grounds filter assy. A1701 to case
MP425		Same as MP424; p/o A401	Grounds filter assy. A1701 to case
MP426		Same as MP424; p/o A401	Grounds filter assy. A1701 to case
MP427		Same as MP424; p/o A401	Grounds filter assy. A1701 to case
MP428		SPRING, GROUNDING: beryllium copper; 12-3/8″ lg; Magnavox part/dwg 639178–16; p/o A401	Grounds filter assy. A1701 to case
MP429	2	SLIDE ASSEMBLY: 20-15/16″ lg x 4-61/64″ wd; Magnavox part/dwg 437822–2; p/o A401	Supports equipment for maintenance (See figure 1–2)
MP430	2	SLIDE ASSEMBLY: 20-15/16″ lg x 4-61/64″ wd; Magnavox part/dwg 437822–1; p/o A401	Supports equipment for maintenance (See figure 1–2)
A501	4,7	FRAME ASSEMBLY	Supports major subassemblies
MP529		CLIP: beryllium copper; 5/8″ wd x 3/4″ lg; 2 mtg holes 0.136″ diam; Magnavox part/dwg 639250–2; p/o A501	Supports H–260 (See figure 6–10)
MP530		STUD, CABLE: 23/64″ lg; 1/8″ diam; Magnavox part/dwg 118411–8; p/o A501	Supports fixed end of O273 (See figure 1–3)
MP535		STUD, CABLE: 27/64″ lg; 5/32″ diam; Magnavox part/dwg 118411–2; p/o A501	Supports fixed end of O274. Left hand (See figure 1–3)
MP536		Same as MP535; p/o A501	Right hand
MP537		SPRING, GROUNDING: beryllium copper, Navy spec 46610, nickel plated; Magnavox part/dwg 437807–2; p/o A501	Grounds 2nd IF to frame
MP538		PIN: stainless steel rod, Navy spec. 46S18E class 7, type A; Magnavox part/dwg 118423–2; p/o A501	Guide pins for BFO
MP539		Same as MP538; p/o A501	
MP540		SPRING: beryllium copper; 5/16″ wd x 15/16″ lg; Magnavox part/dwg 639640–2; p/o A501	Supports H265 and H266
MP541		Same as MP540; p/o A501	Supports H265 and H266
A601		DIAL ASSEMBLY: c/o 1 panel assembly, 1 bracket assembly; Magnavox part/dwg 157898–1	(See figure 6–6)
A602		PANEL ASSEMBLY: aluminum alloy die casting; 6.437″ by 7.437″; Magnavox part/dwg 667894–3 p/o A601	(See figure 6–11) (Item 93)
A604		GEAR ASSEMBLY: c/o 1 shaft, 1 stop, 1 pin 7/10″ x 3/8″ lg, 1 gear; Magnavox part/dwg 437803–1	(See figure 6–11) (Item 87)
A605		DIAL ASSEMBLY: c/o dial, 3 rivets, gear, aluminum front; Magnavox part/dwg 157880–1	(See figure 6–11) (Item 82)
A606		DIAL ASSEMBLY: c/o dial, 1 gear & hub detail; 1 dial holder, 1 cam, 9 rivets, 2 springs; Magnavox part/dwg 157881–1	(See figure 6–11) (Item 76)
A607		FOLLOWER ASSEMBLY: c/o 1 arm, 1 bushing, 1 stud, 1 roller; Magnavox part/dwg 118447–1	(See figure 6–11) (Item 86)

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
A608		DRIVE ASSEMBLY: c/o 1 housing, 1 spur gear, 1 gear, 1 cam, 1 shaft, 3 taper pins, 1 detent & gear, 1 spring, 1 ball & hardware; Magnavox part/dwg 118454-1	(See figure 6-11) (Item 29)
A609		DIAL ASSEMBLY: c/o gear & hub assembly; dial; 3 screws; flat washer; Magnavox part/dwg 157877-1	(See figure 6-11) (Item 50)
A610	4	GEAR AND HUB ASSEMBLY: c/o 1 gear and hub, 2 bushings, 2 springs; Magnavox part/dwg 118489-1 p/o A609	(See figure 6-11)
A611		Same as E274	(See Figure 6-11) (Item 23)
A612		LENS ARM ASSEMBLY: c/o slide assembly, 1 projection lens, 1 lens assembly, 2 bracket assemblies; Magnavox part/dwg 639512-1	(See figure 6-11) (Item 55)
A613		SLIDE ASSEMBLY: c/o 1 slide, 5 pins; Magnavox part/dwg 639484-1 p/o A612	
A614		LENS ASSEMBLY: c/o 1 barrel, 2 lens, 1 spacer; Magnavox part/dwg 437820-1 p/o A612	
A619		SHAFT ASSEMBLY: c/o 1 plate, 1 shaft; Magnavox part/dwg 118446-2	(See figure 6-11) (Item 5)
A620		ARM ASSEMBLY: c/o 1 shaft, 1 pointer, 1 arm; Magnavox part/dwg 639411-2	(See figure 6-11) (Item 17)
A622		COUPLING ASSEMBLY: Magnavox part/dwg 437834-3	(See figure 6-11) (Item 45)
DS601		DIAL: Magnavox part/dwg 157879-1 p/o A605	
DS602		DIAL: frosted aluminum; 3-7/16″ dia x .032″ thk; Magnavox part/dwg 157897-1 p/o A606	
DS603	4	DIAL: measurement unit "DEG," 5°.14′ to 175°.15′ left to right range of inscription; range of inscription is linear; graduated in 60 scale div; glass material; Magnavox part/dwg 157899-1 p/o A609	
DS606		VERNIER: No scale markings, aluminum 0.032″ thick; Magnavox part/dwg 157878-1	(See figure 6-11) (Item 80)
MP602		INSERT BEARING: phosphor bronze; 7/16″ dia x .397″ lg; Magnavox part/dwg 118398-2 p/o A602	
MP603		BUSHING: phosphor bronze; 2.500″ I.D.; 19/32″ max O.D. x .650″ lug; Magnavox part/dwg 118374-2 p/o A602	
MP607		BUSHING: phosphor bronze; .3744 min I.D.; .610 max O.D. x .812″ lg; Magnavox part/dwg 118386-2 p/o A602	
MP608		STUD: SST; 0.1872″ dia x 5/8″ lg; Magnavox part/dwg 118397-2 p/o A602	
MP609		SPRING, GROUNDING: phosphor bronze; 1/32″ thk x 7/32″ w x 5-15/32″ lg; Magnavox part/dwg 639374-2 p/o A602	
MP610		SPRING, GROUNDING: phosphor bronze; 1/32″ thk x 7/32″ w x 5″ lg; Magnavox part/dwg 639374-4 p/o A602	
MP611		SPRING, GROUNDING: phosphor bronze; 1/32″ thk x 7/32″ w x 4-15/32″ lg; Magnavox part/dwg 639374-6 p/o A602	
MP612		SPRING, GROUNDING: phosphor bronze; 1/32″ thk x 7/32″ w x 3″ lg; Magnavox part/dwg 639374-8 p/o A602	
MP613		SPRING, GROUNDING: phosphor bronze; 1/32″ thk x 7/32″ w x 2″ lg; Magnavox part/dwg 639374-10 p/o A602	
MP614		SPRING, GROUNDING: phosphor bronze; 1/32″ thk x 7/32″ w x 1-15/32″ lg; Magnavox part/dwg 639374-12 p/o A602	
MP615		SPRING, GROUNDING: phosphor bronze; 1/32″ thk x 7/32″ w x 1″ lg; Magnavox part/dwg 639374-14 p/o A602	

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
MP616		SHAFT: Stainless steel rod, Navy spec 46S18E; class 7, type A, 0.249″ dia, 1.156″ lg; Magnavox part/dwg 118402–2 p/o A604	
MP617		STOP: phosphor bronze; commercial spec. ASTM–B–139–49T, alloy 82; Magnavox part/dwg 118392–2 p/o A604	
MP619		GEAR: brass, Navy spec. 47B2H; Magnavox part/dwg 437802–1 p/o A604	
MP624		STUD: stainless steel, Navy spec 46S18E, class 7; type A; 0.249″ dia, 2.421″ lg; Magnavox part/dwg 118399–2	(See figure 6–11) (Item 83)
MP625		GEAR: phosphor bronze; commercial spec. ASTM–P–139–49T; alloy 82; Magnavox part/dwg 118443–1 p/o A605	
MP627		GEAR: brass, 0.040″ thk; Navy spec. 47B2H; Magnavox part/dwg 118332–2 p/o A606	
MP628		CAM; aluminum alloy; Navy spec. 47A11E, anodized; Magnavox part/dwg 639189–2 p/o A606	
MP629		DIAL HOLDER: soft aluminum alloy; Navy spec. 47A4D; Magnavox part/dwg 639312–2 p/o A606	
MP630		SPRING: music wire, cadmium plated; Magnavox part/dwg 108350–1 p/o A606	
MP631		Same as MP630 p/o A606	
MP632		ARM: stainless steel, 0.062″ thk; Navy spec. 47S20, class 4, condition A; Magnavox part/dwg 639254–2 p/o A607	
MP633		BUSHING: brass, Navy spec. 46BK6, 0.187″ I.D.; Magnavox part/dwg 118412–2 p/o A607	
MP634		STUD: stainless steel, Navy spec. 46S18E, class 7, type A; Magnavox part/dwg 118395–2 p/o A607	
MP635		ROLLER: brass; Navy spec. 47B2H Magnavox part/dwg 118396–2 p/o A607	
MP636		Same as E273	(See figure 6–11) (Item 1)
MP637		Same as MP636	(See figure 6–11) (Item 7)
MP638		Same as E283	(See figure 6–11) (Item 15)
MP639		SPRING: music wire; Magnavox part/dwg 108273–502	(See figure 6–11) (Item 51)
MP641		WINDOW: Magnavox part/dwg 437809–2	(See figure 6–11) (Item 34)
MP642		SCREEN: Magnavox part/dwg 448297–1	(See figure 6–11) (Item 38)
MP643		SPRING: music wire; Magnavox part/dwg 108271–502	(See figure 6–11) (Item 84)
MP646		PINION STEM: stainless steel, Navy spec. 46S18E class 7, type A; Magnavox part/dwg 118370–2 p/o A608	
MP647		GEAR: brass; Navy spec. 47B2H; Magnavox part/dwg 118435–2 p/o A608	
MP648		CAM: stainless steel; Navy spec. 46S18E, class 7, type A; Magnavox part/dwg 118328–2 p/o A608	
MP649	4	For reference only	
MP650	4	For reference only	
MP651		SHAFT: Magnavox part/dwg 118372–2 p/o A608	
MP652	4	For reference only	
MP653	4	For reference only	
MP654	4	For reference only	
MP655		DETENT AND GEAR: Magnavox part/dwg 639430–1 p/o A608	

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
MP659		Same as O271 p/o A608	
MP660		Same as O272 p/o A608	
MP661		GEAR: phosphor bronze, ASTM-B-139-49T; alloy 82; Magnavox part/dwg 118366-2	(See figure 6-11) (Item 61)
MP665		COVER: aluminum alloy 0.032″ thk; 1.078″ w, 3.125″ lg; Magnavox part/dwg 639338-3 p/o A612	
MP666		COVER: aluminum alloy; 0.032″ thk; 1.078″ w, 1.531″ h, 3.000″ lg; Magnavox part/dwg 639190-2 p/o A612	
MP667		BALL: stainless steel; Magnavox part/dwg 102057-10 p/o A612	
MP668		SPRING: music wire, cadmium chromate finish; Magnavox part/dwg 108336-502 p/o A612	
MP669		PIN: stainless steel, Navy Spec. 46S18E class 7, Type A; Magnavox part/dwg 118387-2 p/o A612	
MP670		PIN: stainless steel, Navy Spec. 46S18E class 7, Type A; Magnavox part/dwg 118362-2 p/o A612	
MP671		STUD ECCENTRIC: brass, Navy Spec. 47B2H; Magnavox part/dwg 118340-2 p/o A612 (2 req'd)	Lateral Adjustment for I3601 and I3602
MP673		INSERT: phosphorus bronze, ASTM-B-139, nickel plated; Magnavox part/dwg 118419-2 p/o A612	
MP674		Same as MP673 p/o A612	
MP675		PIN: brass; 3/8″ dia x 15/64″ lg; Magnavox part/dwg 118339-2 p/o X3601 (2 req'd)	
MP677		SPRING, EXTENSION: Magnavox part/dwg 108277-501 p/o X3601	
MP678		PIN: brass, Navy Spec. 46B6K; Magnavox part/dwg 118385-2 p/o X3601	
MP679		PIN: brass, Navy Spec. 46B6K; Magnavox part/dwg 118385-4 p/o X3601	
MP680		STUD: brass; 0.125 dia x 3/16″ lg; Magnavox part/dwg 118413-2 p/o X3601	
MP681		SPRING: 0.015″ thk music wire; Magnavox part/dwg 639461-2 p/o X3601	
MP682		WASHER, SPRING: Magnavox part/dwg 108327-203 p/o X3601	
MP684		Same as MP675 p/o X3602	
MP685		Same as MP675 p/o X3602	
MP687		Same as MP677 p/o X3602	
MP688		Same as MP678 p/o X3602	
MP689		Same as MP679 p/o X3602	
MP690		Same as MP680 p/o X3602	
MP691		SPRING: 0.015″ thk music wire; Magnavox part/dwg 639461-4 p/o X3602 (2 req'd)	
MP692		Same as MP682 p/o X3602	
MP694		GEAR: brass, Navy Spec. 47B2H; Magnavox part/dwg 118441-2	(See figure 6-11) (Item 59)
MP695		STUD: stainless steel, Navy Spec. 46S18E; Magnavox part/dwg 118373-2	(See figure 6-11) (Item 58)
MP696		GEAR: stainless steel, Navy Spec. 46S18E, class 7, type A; Magnavox part/dwg 118380-2	(See figure 6-11) (Item 63)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
MP697		GEAR: brass, Navy Spec. 47B2H; Magnavox part/dwg 118331–2	(See figure 6–11) (Item 64)
MP698		FOLLOWER: stainless steel, Navy Spec. 46S18E, class 7, type E; Magnavox part/dwg 118341–2	(See figure 6–11) (Item 30)
MP699		PLATE: SST; 1.156″ dia x 0.062″ thk; Magnavox part/dwg 639237–2 p/o A619	
M601		LENS PROJECTOR: c/o clear glass lens, brass holder, Navy Spec. 46BK6; Magnavox part/dwg 437817–2 p/o A612	
A701		TERMINAL BOARD AND PLUG ASSEMBLY: c/o tube V701; capacitors C714, C716, C717 and C718; resistors R702, R703, and R709; Magnavox part/dwg 208170–19	Base of Z701 (See figure 6–48)
A702		I.F. ASSEMBLY, 1*st*: 60 kc for bands 1, 4; 200 kc for bands 2, 3, 5; 22 db loss for bands 1, 4; 40 db loss for bands 2, 3, 5; 2.609″ by 2.812″ by 6.437″ over-all dim.; Magnavox part/dwg 707949–1	(See figure 6–7)
A705		COVER ASSEMBLY: c/o spring Magnavox part/dwg 639385–2; spring Magnavox part/dwg 639385–6; cover Magnavox part/dwg 630434–1 p/o A702	
A706		COVER ASSEMBLY: aluminum alloy; with hardware and captivated screws; Magnavox part/dwg 639577–5 p/o A702	
A710		Same as A126 (2 required) p/o A702	Actuates S701
A711		Same as A126	Actuates S702
C710	3	CAPACITOR, VARIABLE: ceramic; rotary type, single sect. 5 to 25 mmf. 500 vdcw; scrd adj; ceramic base; fungus resistant; Magnavox part/dwg 267820–2	Input Trimmer Z702 (See figure 6–35)
C711	2	CAPACITOR, FIXED: paper dielectric; single sect; 100,000 mmf p/m 10%; 400 vdcw; stabilized wax imp; oper. temp range −40°C to +85°C; Magnavox part/dwg 257912–2	Screen Supply Filtering, V201 (See figure 6–35)
C712		Same as C711	Plate Supply Filtering, V701 (See figure 6–35)
C714	3	CAPACITOR, FIXED: mica; 390 mmf p/m 5%; 500 vdcw; Magnavox part/dwg 257853–27	Blocking Capacitor for V701
C715		Same as C710	Output Trimmer for Z702 (See figure 6–35)
C716		CAPACITOR, FIXED: mica dielectric; 18 mmf p/m 5%; 500 vdcw; Magnavox part/dwg 257853–7	Part of Feedback Network, V701 Grid No. 1 (See figure 6–48)
C717	3	CAPACITOR, FIXED: mica; 82 mmf p/m 5%; 500 vdcw; Magnavox part/dwg 257853–21, p/o Z701	Part of Feedback Network, V701 Grid No. 2 (See figure 6–48)
C718	2	CAPACITOR, FIXED: paper dielectric; single sect; 100,000 mmf p/m 10%; 100 vdcw; vitamin Q impr; Sprague Type 81P10491S1; Magnavox part/dwg 257910–10; p/o Z701	Cathode Resistor Bypass, V701 (See figure 6–48)
C719	2	CAPACITOR, FIXED: paper dielectric; single sect; 100,000 mmf p/m 10%; 100 vdcw; vitamin Q impr; Sprague Type SP210491S1; Magnavox part/dwg 257910–17	Heater Bypass, V701 (See figure 6–35)
C720		Same as C719	Heater Bypass, V701 (See figure 6–35)
C721		Same as C710	With C722 and C723, Tunes T703 Primary (See figure 6–35)
C722		CAPACITOR, FIXED: 500 vdc, 15 mmf, plus or minus 15% tolerance, plastic case; Magnavox part/dwg 257853–6	With C721 and C723, Tunes T703 Primary (See figure 6–35)
C723	3	CAPACITOR, FIXED: mica; 240 mmf p/m 5%; 500 vdcw; Magnavox part/dwg 257853–24	With C721 and C722, Tunes T703 Primary (See figure 6–35)

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
E702	1	BOARD, TERMINAL: general purpose seven brass stud type term solder dipped; two rows 3/8″ c to c, three term in ea row spaced 5/32″ c to c and one term on same centerline two mtg hole; lam glass cloth; 27/32″ lg x 5/8″ wd x 5/16″ thk; 0.147″ diam 19/32″ c to c; Magnavox part/dwg 208131-1	Supports Wiring (See figure 6-35)
E703	1	BOARD, TERMINAL: general purpose; six brass stud type term solder dipped two rows of tem 1″ c to c, three term in ea row spaced 0.531″ and 0.203″ c to c; lam phenolic board; 1-1/4″ lg x 31/32″ wd x 3/16″ thk; one 17/64″ lg x 1/4″ wd mtg slot in each end; Magnavox part/dwg 208119-1	Supports Capacitors (See figure 6-35)
E704	1	BOARD, TERMINAL: general purpose; two single end and three feedthru brass, stud type term solder dipped; irregularly spaced; lam phenolic board; 1-15/32″ lg x 11/16″ thk; two mtg holes 0.147″ diam 1-7/32″ c to c; Magnavox part/dwg 208118-1	Supports R701 and Wiring (See figure 6-35)
E705	1	BOARD, TERMINAL: general purpose; six brass stud type term solder dipped; two rows 11/16″ c to c; three term in ea row spaced 5/32″ c to c; lam phenolic board; 15/16″ lg x 29/32″ wd x 7/16″ thk; integral "L" shape mtg bkt w/ #4-40 clinch nuts on 0.437 ctr; Magnavox part/dwg 208116-1	Supports Resistors and Capacitors (See figure 6-35)
E709		SPRING, GROUNDING: beryllium copper; 11/16″ wd x 4-31/32″ lg x 3/32″ thk; Magnavox part/dwg 639376-2 p/o A706	
E710		SPRING, GROUND: 2 mtg holes 0.102″ diam; 9/16″ wd x 27/32″ lg x 1/2″ thk; Magnavox part/dwg 639385-4 p/o A706	
E711		Same as E710 p/o A706	
H725		SCREW: stainless steel, round head cross recess drive, A1S1430, 0.665 in. lg Magnavox part/dwg 108324-103 p/o A702	
H726		Same as H725 p/o A702	
H727		Same as H725 p/o A702	
H728		Same as H725 p/o A702	
H766		BUSHING: Brass, Navy Spec. 47B2h; nickel plated; head 9/32 in. dia; bushing 3/32 in. lg; Magnavox part/dwg 118408-2 p/o A702	Support for J701
H767		Same as H766 p/o A702	Support for J701
H768		Same as H766 p/o A702	Support for J702
H769		Same as H766 p/o A702	Support for J702
J701	2	CONNECTOR, RECEPTACLE: three round male cont, pol; straight type; 57/64″ lg x 3/8″ wd x 55/64″ thk; 5 amp, 100 v; rectangular phenolic body; two #4-40 x 5/16″ lg mtg studs on 0.578″ mtg/c; cont silver or gold pl, term hot tinned dipped; Magnavox part/dwg 187989-7	Plug-in Connector, 1st Unit (See figure 6-35)
J702	3	CONNECTOR, RECEPTACLE: seven round male cont, pol; straight type; 1-11/64″ lg x 3/8″ wd x 55/64″ thk o/a; 5 amp, 1000 v; rectangular, phenolic body; two #4-40 x 5/16″ lg mtg studs on 0.858″ mtg/c; cont silver or gold pl, term hot tin dipped; Magnavox part/dwg 187989-4	Plug-in Connector, 1st Unit (See figure 6-35)
MP700		SHAFT: 2.875″ lg x 0.484″ max diam; Magnavox part/dwg 118382-4 p/o A619	
MP701		SPRING, GROUNDING: 7/16″ wd x 29/64″ lg x 3/32″ thk; Magnavox part/dwg 639386-2 p/o A702	
MP702		Same as MP701 p/o A702	
MP704		SPRING, GROUNDING: 1/2″ wd x 27/32″ lg; Magnavox part/dwg 639385-2 p/o A705	
MP705		Same as MP704 p/o A705	
MP706		Same as MP704 p/o A705	

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
MP707		SPRING, GROUNDING: 1/2″ wd x 13/32″ lg; Magnavox part/dwg 639385–6 p/o A705	
MP709		COVER ASSEMBLY: c/o 1 cover which is aluminum alloy, 0.031″ thk; Navy Spec. 47A11E; Magnavox part/dwg 639577–3 p/o A706	
MP712		Same as MP120 p/o A710	
MP713		Same as MP121 p/o A710	
MP714		CLIP, SPRING TENSION: 9/32″ wd x 23/32″ lg x 13/32″ h; Magnavox part/dwg 639488–2 p/o A702	Supports Y701 (See figure 6–16)
R701		Same as R101 p/o A702 Plate Decoupling, V201 (See figure 6–35)	
R702	2	RESISTOR, FIXED: comp; MIL type RC20GF103J; 10,000 ohms p/m 5%; 1/2 w; spec MIL–R–11A; Magnavox part/dwg 237814–183	#2 Grid Leak V701 (See figure 6–48)
R703	2	RESISTOR, FIXED: comp; JAN type RC20GF105J; 1 meg p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–231; p/o Z1101	#1 Grid Leak, V701 (See figure 6–48)
R704		Same as R103; p/o Z701	Cathode Resistor, V701 (See figure 6–48)
R705	2	RESISTOR, FIXED: comp; JAN type RC20GF822J; 8200 ohms p/m 5%; 1/2 w; Magnavox part/dwg 237814–181	Plate Decoupling, V701 (See figure 6–35)
R706		RESISTOR, FIXED: comp; JAN type RC20GF680J; 68 ohms p/m 5%; 1/2 w; spec MIL–R–11A, Magnavox part/dwg 237814–131	(See figure 6–35)
S701	3	SWITCH, ROTARY: 2 pole; 6 position, 6 throw; single sect; 2 amp, 500 v peak; silver cont; ceramic body; 1-7/16″ h x 1″ wd x 0.843″ lg; shorting type cont; detent action; screw type term on rotor, solder lug term on stator; two #2–56 x 3/16″ d tapped mtg holes on 1.187″ mtg/c; 1/8″ diam shaft extends 9/32″ beyond mtg surface w/ 15/32″ diam x 3/32″ lg shoulder at sw end; Magnavox part/dwg 167903–1	Band Switch, 1st IF Unit (See figure 6–35)
S702		Same as S701	Band Switch, 1st IF Unit (See figure 6–35)
T703	3	TRANSFORMER, IF: 200 kc peak freq; 1st IF unit IF transformer; shielded; 1.304″ max high x 0.572″ diam o/a; powdered iron core; tuning; single mtg bushing 1/4″—32 thd x 0.329″ lg thd; four solder lug tem; # term marked A and C, secd term marked B and D; Magnavox part/dwg 367978–12	Output Transformer, 1st IF Unit (See figure 6–35)
V701		Same as V151; p/o Z701	Second Converter, 1st IF Unit (See figure 6–48)
X701	3	SOCKET, CRYSTAL: NT 491932; ceramic body; beryllium copper, silver pl cont; two cont spaced 0.486″ c to c; term hot tin dipped; oval shape; 53/64″ lg x 3/8″ wd x 3/8″ thk less term, term extend 19/64″ beyond body; single 0.125″ diam mtg hole centrally located; marked w/ NT#; Eby Cat #9006; Magnavox part/dwg 187994–1	Socket for Y701 (See figure 6–35)
X702		CONNECTOR, RECEPTACLE: Eight round female cont; straight type; used as receptacle for 1st IF assem; 1-1/4″ lg x 1″ wd x 1/4″ thk; 1000 v RMS, 5 amp; rectangular phenolic body, single 0.765″ diam hole in ctr; two 0.128″ diam mtg holes on 0.687″ x 0.937″ ctr; Magnavox part/dwg 187992–1	Socket for Z701 (See figure 6–17)
Y701		CRYSTAL UNIT, QUARTZ: one xtal plate; 140 kc; operable temp range −40°C to +85°C; two pins spaced on bottom 0.486″ c to c, solid pins 0.050″ diam x 0.243″ lg, oval shape body, 1.538″ lg x 0.750″ wd x 0.345″ thk; Magnavox part/dwg 537862–2	Crystal for 2nd Local Oscillator, 1st IF Unit (See figure 6–16)

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
Z701		CONVERTER, SUB-ASSEMBLY: provides mtg for tube, and associated components of freq converter; c/o one chassis, one connector, one latch, four capacitors C714, C716, C717, C718, three resistors R702, R703, R704, 1 tube JAN 5636; 6.3 v 150 ma heater, 120 v DC power supply, input freq 60 kc, output freq 200 kc; rectangular; 2-15/32″ lg x 1-1/4″ wd x 1-7/64″ thk o/a approx; mts by plugging into socket, held in place by latch located on top; when used w/ external xtal provides oscillation at 140 kc required for freq conversion; Magnavox part/dwg 188006-1	Plug-in Sub-Assembly, 1st IF Unit (See figure 6-17)
Z702		FILTER, BAND PASS: mid freq 60 kc; bandwidth 59 kc to 61 kc; 3-55/64″ lg x 2-1/16″ h x 29/32″ wd; 150,000 ohms input and output impedance; rectangular metal case; mts by two 0.156″ diam mtg holes spaced 2.718″ c to c; four solder lug term; HS; Magnavox part/dwg 327889-1	Selectivity Filter, 1st IF Unit (See figure 6-35)
H806		Same as H258 p/o A601	(See figure 6-11) (Item 21)
H807		SCREW: material, brass, Navy Spec 47B2H, headed, no. 8-32 thd; Magnavox part/dwg 118371-2 p/o A612	
H808		Same as H807 p/o A612	
MP801		WASHER, SPRING: Spring steel, cadmium plated; Magnavox part/dwg 108799-538 p/o A601	(See figure 6-11) (Item 4)
MP802		LOCK: Brass, Navy Spec. 47B2H; Magnavox part/dwg 118375-2	(See figure 6-11) (Item 14)
MP810		SLEEVE: Phosphor bronze, Commercial spec. ASTM-B-139-49T alloy B2; Magnavox part/dwg 118424-4 p/o A622	
A1001		COVER ASSEMBLY: c/o cover Magnavox part/dwg 639428-1; bushing Magnavox part/dwg 118390-16; bushing Magnavox part/dwg 118390-4; Magnavox part/dwg 639431-2 p/o A1004	(See figure 1-2)
A1002		BRACKET, SWITCH: aluminum, "L"-shaped bracket assy; 1-5/16″ x 2-1/8″ x 2-19/32″ overall dim.; Magnavox part/dwg 639355-4	Supports S1003
A1003	1	COVER, CABLE: aluminum alloy; satin etch and clear water dip finish; 3-7/8″ lg x 3-5/32″ wd x 15/32″ h x o/a; mts by three integral mtg bkts provided w/0.250″ diam hole which accommodates #6-32 x 9/16″ machine screws; Magnavox part/dwg 639283-1 p/o A1004	
A1004		I.F. ASSEMBLY: c/o 3 stages of I.F. Amplification, 1 detector, 1 cathode follower stage, B.F.O. Mixer stage, tuning indicator rectifier circuit, 1 A.G.C. delay stage, 2 section mechanical filter, 1 section electrical; Magnavox part/dwg 710181-2	(See figure 6-6)
A1005		CHASSIS ASSEMBLY: Aluminum alloy, Chassis; c/o 4 bushings, 4 screws, 4 washers, 4 lockwashers; Magnavox part/dwg 710193-5	Chassis for A1004
A1007		COUPLING ASSEMBLY: c/o coupling Magnavox part/dwg 118483-4; pin Magnavox part/dwg 118368-4; Magnavox part/dwg 118484-1	Drives S1003 (See figure 6-23)
A1008		Same as A1007	Drives S1002 (See figure 6-23)
A1009		COVER ASSEMBLY: aluminum alloy, 1.375 in. by 4.140 in. by 3.750 in. over-all dim.; Magnavox part/dwg 639431-1 p/o A1001	
A1010		BRACKET ASSEMBLY: Magnavox part/dwg 639355-3 p/o A1002	
A1012		TERMINAL BOARD ASSEMBLY: Magnavox part/dwg 208123-1 p/o E1001	
A1016		TERMINAL BOARD ASSEMBLY: c/o Terminal board with rivet type terminals; Magnavox part/dwg 208215-1 p/o E1011	
A1019		CHASSIS AND PLUG ASSEMBLY: Magnavox part/dwg 208170-9	Base for Z1004

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
A1026		CHASSIS AND PLUG ASSEMBLY: Plastic, MIL–14A, type MFE; Magnavox part/dwg 208170–10	Base for Z1006
A1033		CHASSIS AND PLUG ASSEMBLY: c/o Terminal board with terminals, plastic plug and receptacle; Magnavox part/dwg 208170–11	Base for Z1008
A1035		FRAME ASSEMBLY: c/o 1 frame assy, 1 transformer, 1 terminal board assy, and hardware; Magnavox part/dwg 639717–1	Base for Z1009
A1039		CHASSIS AND PLUG ASSEMBLY: c/o Terminal board with terminals, plastic plug and receptacle; Magnavox part/dwg 208170–12	Base for Z1010
A1046		CHASSIS AND PLUG ASSEMBLY: c/o Terminal board with terminals, plastic plug and receptacle; Magnavox part/dwg 208169–2	Base for Z1012
A1048		CHASSIS AND PLUG ASSEMBLY: c/o Terminal board with terminals, brass chassis and top plate; Magnavox part/dwg 208169–3	Base for Z1013
A1050		CHASSIS AND PLUG ASSEMBLY: c/o Terminal board with terminals, plastic plug and receptacle; Magnavox part/dwg 208170–13	Base for Z1014
CR1001		CRYSTAL: JAN 1N69A; Germanium; Magnavox part/dwg 537809–8	(See figure 6–30)
C1001	2	CAPACITOR, FIXED: mica dielectric; 120 mmf p/m 5%; 500 vdcw; Magnavox part/dwg 257853–9	BFO Mixer Output Filtering (See figure 6–36)
C1029	3	CAPACITOR, VARIABLE: ceramic; rotary type; single sect; 5 to 25 mmf; 500 vdcw; temp coef 0; 3/4″ lg x 17/32″ wd x 27/32″ thk o/a approx; solder lug term; two mtg holes 0.120″ diam on 5/16″ mtg/c; scdr adj; ceramic base; fungus resistant; Magnavox part/dwg 267820–1	Output Trimmer; Z1015A, Z1015B, Z1016 (See figure 6–36)
C1030	2	CAPACITOR, FIXED: paper dielectric; single sect; 10,000 mmf p/m 10%; 200 vdcw at 85°C; 150 vdcw at 125°C; Pokar impr; Sprague Type 75P10392; Magnavox part/dwg 257805–13	Ground Return Z1015A, Z1015B, Z1016 (See figure 6–36)
C1031	2	CAPACITOR, FIXED: paper dielectric; single sect; 33,000 mmf p/m 10%; 100 vdcw; vitamin Q impr; Sprague Type 81P33391S3; Magnavox part/dwg 257910–7; p/o Z1004	Cathode Resistor Bypass, V1001 (See figure 6–49)
C1032	2	CAPACITOR, FIXED: paper dielectric; single sect; 10,000 mmf p/m 10%; 300 vdcw; Pokar impr; Sprague Type 65P10392; Magnavox part/dwg 257805–10; p/o Z1004	Screen Bypass, V1001 (See figure 6–49)
C1035		Same as C1031; p/o Z1006	Cathode Resistor Bypass, V1002 (See figure 6–50)
C1036		Same as C1032; p/o Z1006	Screen Bypass, V1002 (See figure 6–50)
C1039		Same as C1031; p/o Z1008	Cathode Resistor Bypass, V1003 (See figure 6–51)
C1040		CAPACITOR, FIXED: ceramic dielectric; JAN type CC20CH150G; 15 mmf p/m 2%; temp coef 0 (tol +60 −112) mmf/mf/°C; 500 vdcw; Magnavox part/dwg 257909–9	Top Coupling, L1016 to T1015
C1041		Same as C1032; p/o Z1008	Screen Bypass, V1003 (See figure 6–51)
C1042	3	CAPACITOR, FIXED: mica dielectric; 2100 mmf p/m 2%; 500 vdcw; temp coef 0 (tol −0 to +40) mmf/mf/°C; capacitance drift shall not exceed 0.05% p/m 0.1 mmf; Magnavox part/dwg 257818–35	With C1043 Tunes T1014 Primary
C1043	3	CAPACITOR, FIXED: ceramic dielectric; 280 mmf p/m 1%; neg temp coef 1500 (tol ±100) mmf/mf°C; 500 vdcw; not to exceed 1.3 times tol range from 25°C to 85°C; Magnavox part/dwg 257903–10	With C1042 Tunes T1014 Primary

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
C1044		CAPACITOR, FIXED: JAN type CC20CH100C; ceramic dielectric; 100 mmf/p/m 0.25 mmf; 500 vdcw; temp coef 0 (tol 60 −112) mmf/mf/°C; JAN-C-20; Magnavox part/dwg 257909-7	Coupling to T1014
C1045		Same as C1031 p/o Z1009	Filters Rectified Output of CR1001
C1046		Same as C1040 p/o Z1018	Top Coupling L1017 to T1016
C1047	3	CAPACITOR, FIXED: paper dielectric; single sect; 4700 mmf p/m 10%; 300 vdcw; Pokar impr; Sprague Type 75P47293; Magnavox part/dwg 257805-17 p/o Z1010	Output Coupling from V1004 Plate (See figure 6-52)
C1048	2	CAPACITOR, FIXED: mica; 22 mmf p/m 10%; 500 vdcw; Magnavox part/dwg 257853-15 p/o Z1010	Coupling to V1004 Grid (See figure 6-52)
C1049		Same as C1032; p/o Z1010	Screen Bypass V1004 (See figure 6-52)
C1050	3	CAPACITOR, FIXED: mica; 510 mmf p/m 5%; 300 vdcw; Magnavox part/dwg 257853-29	Tunes T1013
C1051		Same as C714	Tunes T1013
C1052	3	CAPACITOR, FIXED: mica; 470 mmf p/m 10%; 300 vdcw; Magnavox part/dwg 257853-16 p/o Z1012	Filters Rectified Output from V1005 (See figure 6-53)
C1053	2	CAPACITOR, FIXED: paper dielectric; single sect; 100,000 mmf p/m 10%; 200 vdcw; stabilized wax impr; Sprague Type 88P10492S4; Magnavox part/dwg 257912-1	Coupling from V1006 Cathode (See figure 6-36)
C1054		CAPACITOR, FIXED: mica dielectric; 10 mmf p/m 5%; 500 vdcw; temp coef ltr c; Magnavox part/dwg 257853-5	Coupling to V1007 Grid (See figure 6-55)
C1055	2	CAPACITOR, FIXED: paper dielectric; single sect; 100,000 mmf p/m 10%; 200 vdcw; vitamin Q impr; Sprague Type 91P10492S4; Magnavox part/dwg 257910-3; p/o Z1014	Coupling from V1007 Cathode (See figure 6-55)
C1056		Same as C1032; p/o Z1014	Plate Bypass, V1007 (See figure 6-55)
C1057		CAPACITOR, FIXED MICA DIELECTRIC: 270 uuf ±5%, 500 vdc, 1000 vdc peak working voltage; low-loss plastic case, hermetically sealed; 33/64″ w x 19/64″ h x 7/32″ d; Magnavox part/dwg 257853-25	Tunes L1016
C1058		Same as C223 p/o A1004	Filters Rectified Output from V1005 (See figure 6-36)
C1059		Same as C723; p/o Z1017	Tunes L1016
C1060		Same as C719	Filters Manual Gain Control Circuit (See figure 6-36)
C1061	2	CAPACITOR, FIXED: paper dielectric; single sect; 220,000 mmf p/m 10%; 100 vdcw; vitamin Q impr; Sprague Type 81P22491S2; Magnavox part/dwg 257910-18	Filters 2nd IF Heaters (See figure 6-36)
C1062		Same as C1061	Filters 2nd IF Heaters (See figure 6-36)
C1063	2	CAPACITOR, FIXED: paper dielectric, single sect; 100,000 mmf p/m 10%; 400 vdcw; vitamin Q impr, Sprague Type 81P10494S2; Magnavox part/dwg 257910-20	Plate Supply Filtering, V1004 (See figure 6-36)
C1064		Same as C1048	Coupling from Calibrator Unit to V1002 (See figure 6-36)
C1065		Same as C1030	Automatic Gain Control Filter V1002, Grid Circuit (See figure 6-36)
C1066		Same as C1030	With R1301, Time Constant Determination, V1003 Grid Circuit (See figure 6-36)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
C1067		Same as C1057; p/o Z1018	Tunes L1017
C1068		Same as C1057; p/o Z1018	Tunes L1017
E1001	1	BOARD, TERMINAL: general purpose; nine large stud type term, five small stud type term; three adj link on rear of large term; term irregularly spaced; lam phenolic board; 1/16″ thk, LTS–E–4 in JAN-P-13; 1-25/32″ lg x 1-1/32″ wd x 7/16″ thk o/a approx; two 0.147″ diam mtg holes 1-3/8″ c to c; Magnavox part/dwg 208123–2	(See figure 6–36)
E1002	1	BOARD, TERMINAL: general purpose; five stud type term; irregularly spaced; lam glass cloth, silicone resin board; 1-1/2″ lg x 1-1/8″ wd x 3/8″ thk o/a approx; mts by two #4–40 quintlock nuts on 1.25″ mtg/c; marked C1065, R1030, R1005, C1030; one corner beveled; Magnavox part/dwg 208121–1	Supports Resistors and Capacitors (See figure 6–36)
E1003	1	BOARD, TERMINAL: general purpose; four brass stud type term irregularly spaced; lam glass cloth, silicon resin board; 1-1/2″ lg x 1-1/8″ wd x 3/8″ thk o/a approx; mts by two #4–40 quintlock nuts on 1.25″ mtg/c; marked C1066, R1031; one corner beveled; Magnavox part/dwg 208121–2	Supports Resistors and Capacitors (See figure 6–36)
E1004	1	BOARD, TERMINAL: general purpose; four brass stud type term solder dipped; term on 0.812″ x 3/8″ ctrs; lam phenolic board; 1-3/32″ lg x 5/8″ wd x 7/32″ thk o/a; two #2–56 tapped mtg holes 0.812″ c to c; Magnavox part/dwg 208128–1 p/o Z1017	Supports Capacitors (See figure 6–70)
E1005		Same as E1004; p/o Z1018	Supports Capacitors (See figure 6–70)
E1006		Same as E1004; p/o Z1011	Connectors for Z1011 (See figure 6–69)
E1007	1	BOARD, TERMINAL: general purpose; two feedthru and five single end stud type term solder dipped; irregularly spaced; lam glass cloth, silicone resin board; 1-25/32″ lg x 31/32″ wd x 5/16″ thk o/a; three 0.136″ diam mtg holes irregularly spaced; rectangular shape; Magnavox part/dwg 208127–1; p/o Z1009	Connections for Z1009 (See figure 6–68)
E1011	1	BOARD, TERMINAL: general purpose; binding post strip; five feedthru and two single end ins solder lug post type term; feedthru term spaced 17/64″ c to c, single end term spaced 13/32″ c to c; brass board; 2-3/8″ lg x 1-7/8″ wd x 19/32″ h; two #2–56 tapped mtg holes on 1.625″ mtg/c; marked w/ C1060, C1061, C1062, C1063; Magnavox part/dwg 208215–2	Supports Capacitors (See figure 6–36)
E1014	1	BOARD, TERMINAL: three rows of term holes; first row seven term spaced 1/4″ apart, second row two term spaced 1/2″ apart, third row three term spaced 1/4″ apart, fourth term spaced 1/2″ from other three; rows spaced 13/32″ apart; lam glass cloth, silicone resin board; 2-5/32″ lg x 1-1/8″ wd x 1/8 thk; four 0.070″ diam mtg holes on 1.906″ x 0.312″ mtg/c; marked w/ R1032, C1001, R1001 and C1053; Magnavox part/dwg 208102–1	Mounts Resistors and Capacitors in 2nd IF (See figure 6–36)
E1023		LINK: brass 0.032 in. thk, Navy Spec 47B2H; Magnavox part/dwg 639296–4 p/o E1001	
E1024		Same as E1023 p/o E1001	
E1025		Same as E1023 p/o E1001	
H1001		Same as H725; p/o A1005	
H1002		Same as H1001 p/o A1005	
H1003		Same as H1001 p/o A1005	
H1004		Same as H766 p/o A1004	
H1007		Same as H1001 p/o A1005	
H1017		Same as H1001 p/o A1001	

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
H1018		Same as H1001 p/o A1001	
H1019		Same as H1001 p/o A1001	
H1033		Same as H1001 p/o A1003	
H1034		Same as H1001 p/o A1003	
H1035		Same as H1001 p/o A1003	
H1070		Same as H1004 p/o A1004	
J1001		Same as J701	Plug-in Connector, 2nd IF Unit (See figure 6-36)
J1002	3	CONNECTOR, RECEPTACLE: 18 round male cont. pol; straight type; 1-5/16″ lg x 9/16″ wd x 27/32″ d o/a; 3 amp; rectangular plastic body; two #4-40 x 1/4″ lg mtg studs on 1″ mtg/c on term side; term and cont identified by ltrs, cont silver pl; RSW; Winchester Electronics Co. Cat #MRE-18P-G; Magnavox part/dwg 187991-1	Plug-in Connector, 2nd IF Unit (See figure 6-36)
L1013		COIL: 200 kc peak freq; pri inductance 1.22 mp p/m 8%, 9.8 ohms DC resistance; 1.117″ h x 0.572″ diam; Magnavox part/dwg 367978-18 p/o Z1011	(See figure 6-30)
L1016		COIL: 200 kc peak freq; pri inductance 2.34 mh p/m 8%, 13.6 ohms DC resistance; 1.117″ h x 0.572″ diam; Magnavox part/dwg 367978-17 p/o Z1017	(See figure 6-30)
L1017		Same as L1016 p/o Z1018	
MP1006		COVER: 2.625″ wd x 8-3/4″ lg x 1-3/8″ h o/a; Magnavox part/dwg 639428-1 p/o A1009	
MP1011		COVER: 2-3/8″ wd x 3-3/8″ lg x 15/32″ thk; Magnavox part/dwg 639345-2 p/o A1003	
MP1013		HUB: 0.216″ lg x 3/8″ diam o/a; Magnavox part/dwg 118405-6 p/o A1004	Support bearing for S1001
MP1014		HUB: 0.328″ lg x 3/8″ diam o/a; Magnavox part/dwg 118405-2 p/o A1004	Support bearing for S1002
MP1015		COUPLING: c/o 1 coupling which is stainless steel, AM S5358; Magnavox part/dwg 118483-4 p/o A1007/A1008	
MP1016		Same as MP121 p/o A1007/A1008	
MP1017		BUSHING: 11/64″ lg x 3/16″ diam o/a; Magnavox part/dwg 118379-2 p/o Z1017 (2 reqd)	
MP1018		Same as MP1017 p/o Z1018 (2 reqd)	
MP1019		BUSHING: 11/64″ lg x 3/16″ diam o/a; Magnavox part/dwg 118379-4 p/o A1035	
MP1020		Same as MP1019 p/o A1035	
MP1022		Same as MP1017 p/o Z1011	
MP1023		Same as MP1017 p/o Z1011	
MP1024		SHAFT: 1-1/16″ lg x 0.124″ diam o/a; Magnavox part/dwg 118367-14 p/o A1004	Switch shaft for S1001
MP1025		SHAFT: 3-5/8″ lg x 0.124″ diam o/a; Magnavox part/dwg 118367-4 p/o A1004	Switch shaft for S1002
R1001	3	RESISTOR, THERMAL: temp compensating resistor; carbon comp w/ certain metallic oxides; disk type; 15/32″ diam x 5/32″ thk; mts by two radial wire leads 2″ lg x 0.032″ diam; Magnavox part/dwg 237817-1	Gain Compensation, V1003 (See figure 6-36)
R1002		Same as R101	

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
R1005	2	RESISTOR, FIXED: comp; JAN type RC20GF125J; 1.2 meg p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–233	Automatic Gain Control Decoupling, V1001 (See figure 6–36)
R1006		Same as R108 p/o Z1004	Cathode Resistor, V1001 (See figure 6–49)
R1007		Same as R1002; p/o Z1004	Screen Decoupling, V1001 (See figure 6–49)
R1009	2	RESISTOR, FIXED: comp; JAN type RC20GF203J; 20,000 ohms p/m 5%; 1/2 w; Magnavox part/dwg 237814–190 p/o Z1017	Loads L1016
R1010		Same as R1006; p/o Z1006	Cathode Resistor, V1002 (See figure 6–50)
R1013		Same as R1009; p/o Z1018	Loads L1017
R1014	3	RESISTOR, FIXED: comp; JAN type RC20GF102J; 1000 ohms p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–159; p/o Z1008	With R1001, Cathode Resistor, V1003 (See figure 6–51)
R1015		Same as R129; p/o Z1010	Screen Dropping, V1004 (See figure 6–52)
R1016		Same as R1015; p/o Z1010	Plate Load, V1004 (See figure 6–52)
R1017		Same as R1002; p/o Z1008	Screen Decoupling, V1003 (See figure 6–51)
R1019	2	Same as R109 p/o Z1010	
R1020		Same as R1019; p/o Z1010	#3 Grid Leak, V1004 (See figure 6–52)
R1021		Same as R1014; p/o Z1010	Cathode Resistor, V1004 (See figure 6–52)
R1023	2	Same as R130 p/o A115	(See figure 6–55)
R1024		RESISTOR, FIXED: comp; JAN type RC20GF153J; 15,000 ohms p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–187 p/o Z1011	
R1025		Same as R103; p/o Z1014	Cathode Resistor, V1007 (See figure 6–55)
R1026		Same as R1019; p/o Z1014	Plate Decoupling, V1007 (See figure 6–55)
R1027	2	RESISTOR, FIXED: comp; JAN type RC20GF393J; 39,000 ohms p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–197	Diode Load Resistor, V1005 (See figure 6–36)
R1028	2	Same as R204	With R1029, Automatic Gain Control Delay Voltage Divider (See figure 6–36)
R1029	2	RESISTOR, FIXED: comp; JAN type RC20GF395J; 3.9 meg p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–245	With R1028, Automatic Gain Control Delay Voltage Divider (See figure 6–36)
R1030		Same as R1005	Automatic Gain Control Decoupling and Time Constant (See figure 6–36)
R1031		Same as R1005	With C1066, Time Constant Circuit, V1003 Grid
R1032		Same as R106	Signal Reduction, V1004 Plate (See figure 6–36)
R1033		Same as R1002	(See figure 6–36)

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
S1001	3	SWITCH SECTION, ROTARY: 3 pole, 6 position; 18 cont; single sect; 2 amp, 500 v peak; silver cont; ceramic body; 1-7/16″ lg x 1″ wd x 1/2″ h o/a; detent action; screw term on rotor, solder lug term on stator; two mtg holes 0.086″ diam on 1.187″ mtg/c; 0.127″ sq shaft hole centrally located in rotor; Magnavox part/dwg 167895-1	Switches Inputs, Z1015A, Z1015B (See figure 6-36)
S1002		Same as S1001	Switches Outputs, Z1015A, Z1015B (See figure 6-36)
S1003		Same as S1001	Switches Output Circuits of 2nd IF Units (See figure 6-36)
TB1001		TERMINAL BOARD ASSEMBLY: c/o terminals Magnavox part/dwg 208159-4; terminal board Magnavox part/dwg 448281-2; Magnavox part/dwg 208126-1 p/o Z1017	
TB1002		Same as TB1001 p/o Z1018	
TB1003		TERMINAL BOARD ASSEMBLY: c/o terminals Magnavox part/dwg 208159-4; terminal board Magnavox part/dwg 448294-1; Magnavox part/dwg 208130-1 p/o A1035	
TB1004		Same as TB1001 p/o Z1011	
T1013		COIL; 2000 kc peak freq; pri inductance 1.55 mh p/m 8%, 10.4 ohms DC resistance; 1.117″ h x 0.572″ diam; Magnavox part/dwg 367978-15 p/o Z1011	
T1014		COIL; 2 windings, 0.27 mh nom inductance, untapped; Magnavox part/dwg 367980-16, p/o Z1009	
T1015		COIL; 2000 kc peak freq; pri inductance 2.24 mh p/m 8%, 12.6 ohms DC resistance; 1.117″ h x 0.572″ diam; Magnavox part/dwg 367978-16 p/o Z1017	
T1016		Same as T1015 p/o Z1018	
V1001		Same as V101 p/o Z1004	First Amplifier, 2nd IF Unit (See figure 6-49)
V1002		Same as V1001 p/o Z1006	Second Amplifier, 2nd IF Unit (See figure 6-50)
V1003		Same as V1001 p/o Z1008	Final Amplifier, 2nd IF Unit (See figure 6-51)
V1004		Same as V151 p/o Z1010	BFO Mixer (See figure 6-52)
V1005	3	CRYSTAL UNIT, RECTIFYING: RETMA type 1N458; diode detector; one piece; fusion sealed glass envelope; black finish; saturation voltage 150 v min; forward current at + 1 v 7 ma min; reverse current at 250°C, 0.25 microamp at 125 v; reverse current at 150°C, 0.005 ma at 124 v; forward steady state DC 80 ma max; forward average rect current 55 ma max; surge current for 1 sec 500 ma max; ambient temp range −80°C to +200°C; 0.265″ lg less term x 0.105″ diam; term mtd; tinned domet wire term; Magnavox part/dwg 617817-9 p/o Z1012	(See figure 6-53)
V1006	3	TUBE, ELECTRON: JAN 5647; sub-miniature single diode; p/o Z1013	Detector
V1007		TUBE, ELECTRON: JAN 5718 p/o Z1014	Cathode Follower Output, Amplifier Frequency Shift IF Output (See figure 6-55)
X1001		Same as X702	Socket for Z1004 (See figure 6-36)
X1002		Same as X1001	Socket for Z1006 (See figure 6-36)
X1003		Same as X1001	Socket for Z1008 (See figure 6-36)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
X1004		Same as X1001	Socket for Z1010 (See figure 6–36)
X1005	3	CONNECTOR, RECEPTACLE: six round female cont; straight type; used as receptacle for 2nd IF plug in unit; 1″ lg x 3/4″ wd x 1/4″ thk; 1000 v RMS, 5 amp; rectangular phenolic body, single butterfly shaped hole in ctr; two 0.128″ diam mtg holes on 0.687″ mtg/c; Magnavox part/dwg 187993–1	Socket for Z1012 (See figure 6–36)
X1006		Same as X1005	Socket for Z1013 (See figure 6–36)
X1007		Same as X1001	Socket for Z1014 (See figure 6–36)
Z1004	3	AMPLIFIER, SUB-ASSEMBLY: used as IF v amplifier; c/o one chassis, one connector, one latch, two capacitors C1031, C1032, one resistor R1006, one tube V1006 JAN–5899; 6.3 v 150 ma heater, 120 v DC; rectangular; 2-15/32″ lg x 1-1/4″ wd x 1-7/64″ thk o/a approx; mts by plugging into socket, held in place by latch located on top; cathode connector provided for manual gain control; tube is semi-remote cut-off type to allow for automatic gain control; Magnavox part/dwg 188009–1	Plug-in Sub-Assembly, 1st Amplifier, 2nd IF Unit (See figure 6–49)
Z1006	3	AMPLIFIER, SUB-ASSEMBLY: used as IF v amplifier; c/o one chassis, one connector, one latch, two capacitors C1035, C1036, two resistors R1010, R1011, one tube V1022 JAN–5899; 6.3 v 150 ma heater, 120 v DC; rectangular; 2-15/32″ lg x 1-1/4″ wd x 1-7/64″ thk o/a approx; mts by plugging into socket, held in place by latch located on top; cathode connection provided for manual gain control, tube is semi-remote cut-off type to allow for automatic gain control; Magnavox part/dwg 188010–1	Plug-in Sub-Assembly, 2nd Amplifier, 2nd IF Unit (See figure 6–50)
Z1008	3	AMPLIFIER, SUB-ASSEMBLY: used as IF amplifier; c/o chassis, one connector, one latch, three capacitors C1039, C1040, C1041, four resistors R1014, R1015, R1016, R1017, one tube V1003 JAN–5899; 6.3 v 150 ma heater, 120 v DC; rectangular; 2-15/32″ lg 1-1/4″ wd x 1-7/64″ thk o/a approx; mts by plugging into socket, held in place by latch located on top; cathode connection provided for manual gain control; two outputs provided at different levels of gain; Magnavox part/dwg 188011–1	Plug-in Sub-Assembly, Final Amplifier, 2nd IF Unit (See figure 6–51)
Z1009	3	TRANSFORMER, IF: peak freq 200 kc; tuning indicator circuit; shielded; 1-63/64″ lg x 2-1/4″ h x 5/8″ wd; powered iron core; single tuned; adj iron core; mts by three 0.140″ diam holes, located on side of can; three solder lug term; HS w/ adj core available; Magnavox part/dwg 707948–1	Tuning Indicator Rectifier Circuitry (See figure 6–36)
Z1010	3	AMPLIFIER, SUB-ASSEMBLY: used as IF v amplifier and mixer; c/o one chassis, one connector, one latch, three capacitors C1048, C1049, C1059, four resistors R1020, R1021, R1022, R1032, one tube V1004 JAN 5636; 6.3 v 150 ma heater, 120 v DC; rectangular; 2-15/32″ lg x 1-3/4″ wd x 1-7/64″ thk o/a approx; mts by plugging into socket, held in place by latch located on top; provision is made for mixing BFO signal w/ input signal; Magnavox part/dwg 188012–1	Plug-in Sub-Assembly, BFO Mixer (See figure 6–52)
Z1011	7	TRANSFORMER, IF: for coupling 3rd IF amplifier to detector; 200 kc freq of oper; c/o one frame assem one capacitor, one resistor, one term board, one coil assem, 1-7/32″ lg x 5/8″ wd x 2-1/16″ h o/a; Magnavox part/dwg 707946–3	Couples V1003 to V1005 (See figure 6–36)
Z1012	3	AMPLIFIER, SUB-ASSEMBLY: used in detector circuit; c/o one chassis and plug assem, one capacitor C1052, one tube V1005 JAN 5647; 6.3 v AC 150 ma heater; rectangular shape; 3″ lg x 1-7/16″ wd x 15/16″ h o/a; plug-in mtd; Magnavox part/dwg 187999–1	Plug-in Sub-Assembly, Detector (See figure 6–53)

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
Z1013	3	AMPLIFIER, SUB-ASSEMBLY: used in Automatic Gain Control delay; c/o one chassis and plug assem, one capacitor C1053, one tube V1006 JAN-5647; 6.3 v AC 150 ma heater, bias 10 v; rectangular shape; 3″ lg x 1-7/16″ wd x 15/16″ h; plug-in mtd; Magnavox part/dwg 188000-1	Plug-in Sub-Assembly, Automatic Gain Control Delay Diode (See figure 6-54)
Z1014	3	AMPLIFIER, SUB-ASSEMBLY: used as cathode follower; c/o one chassis, one connector, one latch, three capacitors C1054, C1055, C1056, four resistors R1023, R1024, R1025, R1026, one tube V1007 JAN-5718; 6.3 v 150 ma heater, 120 v DC; nom load reactance 70 ohms; rectangular; 2-15/32″ lg x 1-1/4″ wd x 7/64″ thk o/a approx; mts by plugging into socket, held in place by latch located on top; Magnavox part/dwg 188013-1	Plug-in Sub-Assembly, Cathode Follower Amplifier Frequency Shift, IF Output (See figure 6-55)
Z1015	3	FILTER, BAND PASS: 200 kc ctr oper freq, 199.5 to 200.5 kc p/m 0.15 kc bandwidth at 6 db attenuation for first band pass; 200 kc ctr oper freq, 198.5 kc p/m 0.3 kc bandwidth at 6 db attenuation for second band pass; 810 ohms input impedance, 30,000 ohms output impedance; 3-13/16″ lg x 2-7/16″ wd x 1-1/4″ d o/a; metal rectangular case; mts by four #6-32 thd x 3/8″ lg studs on a 2-3/8″ lg studs on a 2-3/8″ x 1-3/8″ x 39/64″ mtg/c; six stud type term; oper temp range −40°C to +85°C; vacuum sealed; Magnavox part/dwg 327915-1	(See figure 6-36)
Z1016	3	FILTER, BAND PASS: for coupling freq converter to 1st IF amplifier; 200 kc oper freq, 196 to 204 kc bandwidth at 6 db down; 55,000 ohms input and output impedance; 2-15/32″ lg x 1-9/32″ wd x 2.415″ h; rectangular metal case; mts by four #4-40 tapped nuts located two on one edge 1.718″ c to c and two on other edge 0.610″ from centerline of the first two, spaced 0.660″ c to c; four feedthru type term; Magnavox part/dwg 327920-1	Broad Selectivity Filter, 2nd IF Unit (See figure 6-36)
Z1017	3	TRANSFORMER, IF: for coupling kt IF amplifier to 2nd IF amplifier; 200 kc freq of oper; 1-7/32″ lg x 5/8″ wd x 2-1/16″ h; ceramic coil form, powdered iron core; double tuned; adj iron core tuning; mts by two #2-56 thd x 1/4″ lg machine screws and two #2 split lock washers located in diagonally opposite corners of top on a 7/8″ x 3/8″ mtg/c; 12 stud and four feedthru type term; c/o three capacitors C1040, C1057 and C1059, one term board E-1023, one insulator E1025, one r-f coil L1015, one resistor R1009 and one r-f transformer T1015; Magnavox part/dwg 707946-5	Couples V1001 to V1002 (See figure 6-36)
Z1018	3	TRANSFORMER, IF: for coupling 2nd IF amplifier to 3rd IF amplifier; 200 kc freq of oper; 1-7/32″ lg x 5/8″ wd x 2-1/16″ h o/a; ceramic coil forms, powdered iron core; double tuned; adjustable iron core tuning; mts by two #2-56 thd x 1/4″ lg machine screws and two #2 split washers located in diagonally opposite corners of top on a 7-8″ x 3-8″ mtg/c; 12 stud and four feedthru type term; c/o three capacitors C1046, C1067, C1068, one term board E1024, one insulator E1026, one r-f coil L1017, one resistor R1013 and one r-f transformer T1016; Magnavox part/dwg 707946-6	Couples V1002 to V1003 (See figure 6-36)
A1101		AUDIO ASSEMBLY: c/o 3 stages of audio amplification, 1 audio output stage, 1 noise limiter stage, 2 silencer stages, 2 limiting stages, 1 audio output transformer, 1 band pass filter; Magnavox part/dwg 707965-1	(See figure 6-6)
A1106		COVER ASSEMBLY: c/o cover, 2 bushings, 2 screws, 2 washers and 2 lockwashers; Magnavox part/dwg 639458-2 p/o A1101	(See figure 1-2)
A1109		COUPLING ASSEMBLY: c/o one coupling and one pin; Magnavox part/dwg 118484-2 p/o A1101	Drives S1101 (See figure 6-25)
A1112		CHASSIS AND PLUG ASSEMBLY: c/o terminal board with terminals, plastic plug and receptacle; Magnavox part/dwg 208170-14	Base for Z1102 (See figure 6-57)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
A1114		TERMINAL BD AND PLUG ASSEMBLY: thermosetting plastic; 1″ h x 0.750″ w x 2-15/32″ lg, o/a; Magnavox part/dwg 208169–5	Base for Z1103 (See figure 6–58)
A1116		CHASSIS AND PLUG ASSEMBLY: c/o terminal board with terminals, plastic plug and receptacles; Magnavox part/dwg 208170–15	Base for Z1104 (See figure 6–59)
A1118		CHASSIS AND PLUG ASSEMBLY: c/o terminal board with terminals, plastic plug and receptacle; Magnavox part/dwg 208170–16	Base for Z1105 (See figure 6–60)
A1120		TERMINAL BD AND PLUG ASSEMBLY: thermosetting plastic; 1″ h x 0.750″ w x 2-15/32″ lg, o/a; Magnavox part/dwg 208169–6	Base for Z1106 (See figure 6–61)
A1122		TERMINAL BD AND PLUG ASSEMBLY: thermosetting plastic; 1″ h x 0.750″ w x 2-15/32″ lg, o/a; Magnavox part/dwg 208169-7	Base for Z1107 (See figure 6–62)
A1124		CHASSIS AND PLUG ASSEMBLY: c/o terminal board with terminals, plastic plug and receptacle; Magnavox part/dwg 208170–17	Base for Z1108 (See figure 6–63)
A1126		CHASSIS AND PLUG ASSEMBLY: c/o terminal board with terminals, plastic plug and receptacle; Magnavox part/dwg 208170–18	Base for Z1109 (See figure 6–64)
A1127		TERMINAL BD AND PLUG ASSEMBLY: thermosetting plastic; 1″ h x 0.750″ w x 2-15/32″ lg, o/a; Magnavox part/dwg 208169–4	Base for Z1101 (See figure 6–65)
C1101	2	CAPACITOR, FIXED: paper dielectric; single sect; 220,000 mmf p/m 10%; 100 vdcw; stabilized wax impr; Sprague Type 78P22491S3; Magnavox part/dwg 257912–3	Cathode Bias Filtering, V1101 (See figure 6–37)
C1102	2	CAPACITOR, FIXED: paper dielectric; single sect; 33,000 mmf p/m 10%; 400 vdcw; vitamin Q impr; Sprague Type 91P33394S4; Magnavox part/dwg 257910–5; p/o Z1102	Coupling from V1102 Plate (See figure 6–57)
C1103	3	CAPACITOR, FIXED: paper dielectric; single sect; 1000 mmf p/m 10%; 400 v DC max at 85°C; impr w/high temp organic material Magnavox part/dwg 257805–18	Cathode Resistor Network Bypass, V1103 (See figure 6–58)
C1104		Same as C1102; p/o Z1104	Plate Bypass, V1104 (See figure 6–59)
C1105		Same as C1102; p/o Z1105	Coupling to V1105 Grid (See figure 6–60)
C1106		Same as C1103; p/o Z1105	Plate Bypass, V1105 (See figure 6–60)
C1107	2	CAPACITOR, FIXED: paper dielectric; single section; 47,000 mmf p/m 10%; 200 vdcw; vitamin Q impr; Sprague Type 91P47392S4; Magnavox part/dwg 257910–2; p/o Z1106	Coupling to V1106 Cathode (See figure 6–61)
C1108		CAPACITOR, FIXED: paper dielectric; single sect; 1800 mmf p/m 10%; 300 v DC max at 85°C; impr, w/h temp organic material; Magnavox part/dwg 257805–15 p/o Z1107	Coupling from V1107 Cathode (See figure 6–62)
C1109		Same as C1032; p/o Z1108	Coupling from V1108 Plate (See figure 6–63)
C1110		Same as C1030; p/o Z1109	Screen Bypass, V1109 (See figure 6–64)
C1112	3	CAPACITOR, FIXED: paper dielectric; single sect; 100,000 mmf p/m 10%; 200 vdcw; vitamin Q impr; Sprague Type 91P10492S13; Magnavox part/dwg 257905–1	Audio Input Filtering (See figure 6–37)
C1114		CAPACITOR, FIXED: metalized paper, 300 vdcw. Magnavox part/dwg 257805–16	Output Coupling from V1101 Cathode (See figure 6–56)
C1115		Same as C133; p/o Z1104	Blocking Capacitor V1104 Plate Circuit (See figure 6–59)

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
E1101		BOARD, TERMINAL: general purpose; 18 brass, silver pl stud term; irregularly spaced; lam phenolic board; 3-21/32" lg x 1-3/32" wd x 7/32" thk o/a; two 0.156" diam mtg holes on 3-1/8" mtg/c; wax impr; Magnavox part/dwg 208129-1 p/o A1101	Supports Resistors and Capacitors
H1109		Same as H725 p/o A1101	
H1110		Same as H1009 p/o A1101	
H1111		Same as H1009 p/o A1101	
H1112		Same as H1009 p/o A1101	
H1135		Same as H120 p/o A1106	
H1136		Same as H1135 p/o A1106	
J1101		Same as J1002	Plug-in Connector, Audio Unit (See figure 6-37)
MP1105		COVER: aluminum alloy 1/4 hand; 1-5/32" h x 2-3/8" w x 9-3/32" lg o/a; Magnavox part/dwg 639457-1 p/o A1106	
MP1110		Same as MP1015 p/o A1101	
MP1111		PIN: stainless steel, Navy Spec. 46S18E, class 7, Type A Magnavox part/dwg 118368-6 p/o A1109	
MP1112		SHAFT: SST; 0.125" w x 1-47/64" lg; Magnavox part/dwg 118367-12 p/o S1101	
MP1113		HUB: SST; 0.125" I.D; 0.3121" O.D; Magnavox part/dwg 118405-14 p/o S1101	
R1101		Same as R703; p/o Z1101	Output Coupling, V1101 Cathode (See figure 6-56)
R1102		Same as R131, p/o Z1101	(See figure 6-56)
R1103	2	RESISTOR, FIXED: comp; JAN type RC20GF124J; 120,000 ohms p/m 5%; 1/2 w; spec JAN-R-11; Magnavox part/dwg 237814-209; p/o Z1101	With R1102, Dividing Network, V1101 Plate (See figure 6-56) Detector Signal Filtering (See figure 6-56)
R1104	2	RESISTOR, FIXED: comp; JAN type RC20GF274J; 270,000 ohms p/m 5%; 1/2 w; spec JAN-R-11; Magnavox part/dwg 237814-217; p/o Z1101	Detector Signal Filtering (See figure 6-56)
R1105		Same as R1101; p/o Z1101	Cathode Return, V1101 (See figure 6-56)
R1106	2	RESISTOR, FIXED: comp; MIL type RC20GF821J; 820 ohms p/m 5%; 1/2 w; BF characteristic; color coded; spec MIL-R-11A; Magnavox part/dwg 237814-157	Cathode Resistor, V1102 (See figure 6-57)
R1107		Same as R1023; p/o Z1102	Plate Load, V1102 (See figure 6-57)
R1108	2	RESISTOR, FIXED: comp; JAN type RC20GF155J; 1.5 meg p/m 5%; 1/2 w; spec JAN-R-11; Magnavox part/dwg 237714-235	Audio Input Filtering (See figure 6-37)
R1109		Same as R1107 p/o A1101	Gain Compensation in "Broad" Audio Operation (See figure 6-37)
R1111	2	Same as R154 p/o A1101	Driving Impedance to Z1110 (See figure 6-37)
R1112		Same as R204	Grid Leak, V1102 (See figure 6-37)
R1113		Same as R204	Part of "Limiter" Cathode Network (See figure 6-37)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
R1114		Same as R201; p/o Z1104	Output Load, V1104 Plate (See figure 6–59)
R1115	2	Same as R107	With R1116 and R1117 Cathode Bias Network, V1103 (See figure 6–58)
R1116	2	RESISTOR, FIXED: comp; JAN type RC20GF154J; 150,000 ohms p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–211; p/o Z1103	With R1115 and R116 Cathode Bias Network V1103 (See figure 6–58)
R1117	2	RESISTOR, FIXED: comp; JAN type RC20GF334J; 330,000 ohms p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–219; p/o Z1103	With R1115 and R1116 Cathode Bias Network V1103 (See figure 6–58)
R1118		Same as R1117; p/o Z1104	Coupling V1104 Plate to V1103 Plate (See figure 6–59)
R1119	2	RESISTOR FIXED: comp; JAN type RC20GF272J; 2700 ohms p/m 5%; 1/2 w; spec JAN–R–11, Magnavox part/dwg 237814–169; p/o Z1104	Cathode Resistor, V1104 (See figure 6–59)
R1120	2	RESISTOR, FIXED: comp; JAN type RC20GF134J; 130,000 ohms p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–210; p/o Z1104	With R1119, Bias Network for V1104 Cathode (See figure 6–59)
R1121	2	Same as R1104	Plate Load, V1104 (See figure 6–59)
R1122		Same as R1103; p/o Z1105	Grid Leak, V1105 (See figure 6–60)
R1123		Same as R1106; p/o Z1105	Cathode Resistor, V1105 (See figure 6–60)
R1124		Same as R1023; p/o Z1105	Plate Load, V1105 (See figure 6–60)
R1125		Same as R204; p/o Z1106	With R1126 and R1127 Cathode Bias Network, V1106 (See figure 6–61)
R1126	2	Same as R254; p/o Z1106	With R1125 and R1127 Cathode Bias Network, V1106 (See figure 6–61)
R1127		Same as R1115; p/o Z1106	With R1125 and R1126 Cathode Bias Network, V1106 (See figure 6–61)
R1128		Same as R1115; p/o Z1107	With R1129 and R1130 Cathode Bias Network, V1107 (See figure 6–62)
R1129		Same as R254; p/o Z1107	With R1128 and R1130 Cathode Bias Network, V1107 (See figure 6–62)
R1130		Same as R204; p/o Z1107	With R1128 and R1129 Cathode Bias Network, V1107 (See figure 6–62)
R1131		Same as R1005; p/o Z1108	Grid Leak, V1108 (See figure 6–63)
R1132		Same as R1119; p/o Z1108	Cathode Resistor, V1108 (See figure 6–63)
R1133		Same as R1112; p/o Z1108	Plate Load, V1108 (See figure 6–63)
R1134		Same as R1115; p/o Z1108	With R1132, Feedback Network, V1109 to V1108 (See figure 6–63)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
R1135		Same as R102; p/o Z1108	Grid Leak, V1109
R1136	2	RESISTOR, FIXED: comp; JAN type RC20GF681J; 680 ohms p/m 5%; 1/2 w; Magnavox part/dwg 237814–155; p/o Z1108	Cathode Resistor, V1109 (See figure 6–63)
R1137	2	RESISTOR, FIXED: comp; JAN type RC20GF475J; 4.7 meg p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–247	P/o "Silencer" Control Network (See figure 6–37)
R1138		Same as R1112: p/o Z1108	Grid Leak, V1109 (See figure 6–63)
S1101	3	SWITCH, ROTARY: 5 poles, 18 position 36 cont; two sect; c/o S–1101B; 500 v peak, 2 amp; cont, brass silver pl; ceramic wafers; 1-47/64″ lg x 1-21/32″ h x 1-9/32″ wd o/a, incl shaft; u/w external detent; solder lug term; one #4–40 self-clinching nut on ea side of bkt for mtg; shaft incl crank type coupling w/1-1/8″ throw; Magnavox part/dwg 167896–1	Mode Selection, Audio Unit (See figure 6–37)
S1101A		Same as S1001; p/o S1101	
S1101B		SWITCH, ROTARY: 6 poles, 19 position; Magnavox part/dwg 167895–2; p/o S1101	
T1106	3	TRANSFORMER, AF: plate coupling type; pri 2000 ohms min impedance, seed 150 ohms resistive load, ter 200 ohms resistive load CT; HS metal case; 2-9/32″ lg x 1-1/16″ sq o/a; 1/2″ w max audio oper level; turns ratio pri to secd 7.14 to 1 p/m 3%, pri to ter 6 to 1 p/m 3%; freq response 200 cps to 8000 cps; secd and ter wnd shielded; seven solder lug term on bottom; four #6–32 x 9/32″ lg mtg studs on 3/4″ mtg/c located on bottom; oper temp range −54°C to +85°C; RSW immersion, marked in accordance w/JAN–T–27; Magnavox part/dwg 327877–1	Couples V1109 to Audio Output Circuits
V1101		Same as V1005	Audio Noise Limiting (See figure 6–56)
V1102		Same as V1007; p/o Z1102	
V1103		Same as V1101	Silencer Diode (See figure 6–58)
V1104	3	TUBE, ELECTRON: JAN 5719; subminiature triode; p/o Z1104	Silencer Control Amplifier (See figure 6–59)
V1105		Same as V1102; p/o Z1105	2nd Audio Amplifier (See figure 6–60)
V1106		Same as V1101	Limiter Diode (See figure 6–61)
V1107		Same as V1101	Limiter Diode (See figure 6–62)
V1108		Same as V1104; p/o Z1108	3rd Audio Amplifier (See figure 6–63)
V1109	3	TUBE, ELECTRON: JAN 5902; subminiature beam power pentode; p/o Z1109	Final Audio Amplifier (See figure 6–64)
X1101		Same as X1005	Socket for Z1101 (See figure 6–37)
X1102		Same as X702	Socket for Z1101 (See figure 6–37)
X1103		Same as X1101	Socket for Z1103 (See figure 6–37)
X1104		Same as X1102	Socket for Z1104 (See figure 6–37)
X1105		Same as X1102	Socket for Z1105 (See figure 6–37)
X1106		Same as X1101	Socket for Z1106 (See figure 6–37)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
X1107		Same as X1101	Socket for Z1107 (See figure 6–37)
X1108		Same as X1102	Socket for Z1108 (See figure 6–37)
X1109		Same as X1102	Socket for Z1109 (See figure 6–37)
Z1101	3	AMPLIFIER, SUB-ASSEMBLY: used in noise limiter circuit; c/o one chassis, one connector, one latch, two capacitors C1101, C1114, five resistors R1101, R1102, R1103, R1104, R1105, one tube V1101 JAN 5647; 6.3 v heater at 150 ma; rectangular shape; 2-15/32″ lg x 1-9/32″ wd x 1-7/64″ h o/a approx; mts by plugging into socket, held in place by latch located on top; acts as series type limiter for AC v in excess of 30% of applied DC input v; Magnavox part/dwg 187995–1	Plug-in Sub-Assembly, Audio Noise Limiter
Z1102	3	AMPLIFIER, SUB-ASSEMBLY: used as v amplifier; c/o one chassis, one connector, one latch, one capacitor C1102, two resistors R1106, R1107, one tube V1102 JAN–5718; 6.3 v heater at 150 ma; 120 v DC; rectangular shape; 2-15/32″ lg x 1-9/32″ wd x 1-7/64″ h o/a approx; mts by plugging into socket, held in place by latch located on top; Magnavox part/dwg 188001–1	Plug-in Sub-Assembly, 1st Audio Amplifier
Z1103	3	AMPLIFIER, SUB-ASSEMBLY: used in silencer circuit; c/o one chassis, one connector, one latch, two capacitors C1103, C1115, four resistors R1114, R1115, R1116, R1117, one tube V1103 JAN 5647; 6.3 v heater at 150 ma, 120 v DC bias v; rectangular shape; 2-15/32″ lg x 1-9/32″ wd x 1-7/64″ h o/a approx; mts by plugging into socket, held in place by latch located on top; acts as electronic sw when used in conjunction w/Z1104; Magnavox part/dwg 187996–1	Plug-in Sub-Assembly, Silencer Diode
Z1104	3	AMPLIFIER, SUB-ASSEMBLY: used as DC amplifier in silencer circuit; c/o one chassis, one connector, one latch, one capacitor C1104, four resistors R1118, R1119, R1120, R1121, one tube V1104 JAN 5719; 6.3 v heater at 150 ma, 120 v DC; rectangular shape; 2-15/32″ lg x 1-9/32″ wd x 1-7/64″ h o/a approx; mts by plugging into socket, held in place by latch located on top; Magnavox part/dwg 188002–1	Plug-in Sub-Assembly, Silencer Control Amplifier (See figure 6–59)
Z1105	3	AMPLIFIER, SUB-ASSEMBLY: used as v amplifier; c/o one chassis, one connector, one latch assem, two capacitors C1105, C1106, three resistors R1122, R1123, R1124, one tube V1105 JAN 5718; 6.3 v heater at 150 ma, 120 v DC; rectangular shape; 2-15/32″ lg x 1-9/32″ wd x 1-7/64″ h o/a approx; mts by plugging into socket, held in place by latch located on top; Magnavox part/dwg 188003–1	Plug-in Sub-Assembly, 2nd Audio Amplifier (See figure 6–60)
Z1106	3	AMPLIFIER, SUB-ASSEMBLY: used in output limiter circuit; c/o one chassis, one connector, one latch, one capacitor C1107, three resistors R1125, R1126, R1127, one tube V1106 JAN 5647; 6.3 v heater at 150 ma, 120 v DC fixed bias, 0 to 120 v DC adj bias; rectangular shape; 2-15/32″ lg x 1-9/32″ wd x 1-7/64″ h o/a approx; mts by plugging into socket, held in place by latch located on top; acts to limit pos peaks of applied audio v; Magnavox part/dwg 187997–1	Plug-in Sub-Assembly, Limiter Diode (See figure 6–61)
Z1107	3	AMPLIFIER, SUB-ASSEMBLY: used in output limiter circuit; c/o one chassis, one connector, one latch assem, one capacitor C1108, three resistors R1128, R1129, R1130, one tube V1107 JAN 5647; 6.3 v heater at 150 ma, 120 v DC fixed bias, 0 to 120 v DC adj bias; rectangular shape; 2-15/32″ lg x 1-9/32″ wd x 1-7/64″ h o/a approx; mts by plugging into socket, held in place by latch located on top; acts to limit neg peaks of applied v; Magnavox part/dwg 187998–1	Plug-in Sub-Assembly, Limiter Diode (See figure 6–62)

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
Z1108	3	AMPLIFIER, SUB-ASSEMBLY: used as v amplifier; c/o one chassis, one connector, one latch assem, one capacitor C1109, four resistors R1131, R1132, R1133, R1134, one tube V1108 JAN 5719; 6.3 v heater at 150 ma, 120 v DC; rectangular shape; 2-15/32" lg x 1-9/32" wd x 1-7/64" h o/a approx; mts by plugging into socket, held in place by latch located on top; has connection for feedback from succeeding amplifier, Magnavox part/dwg 188004-1	Plug-in Sub-Assembly, 3rd Audio Amplifier (See figure 6-63)
Z1109	3	AMPLIFIER, SUB-ASSEMBLY: used as power output amplifier, c/o one chassis, one connector, one latch assem, one capacitor C1111, two resistors R1135, R1136, one tube V1109 JAN 5902; 6.3 v heater at 150 ma, 120 v DC; rectangular shape; 2-19/32" lg x 1-9/32" wd x 1-7/16" h o/a approx; mts by plugging into socket, held in place by latch located on top; has connection to provide feedback for preceding amplifier; Magnavox part/dwg 188005-1	Plug-in Sub-Assembly, Final Audio Amplifier (See figure 6-64)
Z1110	3	FILTER, BAND PASS: 1000 cyc peak, 240 to 4300 cyc band width; 4-17/32" lg x 2-1/4" wd x 1" thk o/a; 30,000 ohms impedance at band ctr; rectangular metal case; four #6-32 x 5/16" lg mtg studs on 4-1/8" x 23/32" mtg/c; three solder lug term; oper temp range −54°C to +85°C; RSW immersion marked in accordance w/ JAN-T-27, reference signal 1000 cps; Magnavox part/dwg 327870-1	Controls Response of Audio Unit Figure 6-24
A1301	1	COVER: chassis wiring shield; rectangular shape; 2-13/32" lg x 1-13/16" wd x 1-1/4" h o/a approx; Magnavox part/dwg 639280-1; p/o A1302	Chassis Cover, BFO Unit
A1302		B.F.O. ASSEMBLY: c/o 1 Hartley oscillator; Magnavox part/dwg 707967-1	(See figure 6-6)
C1301		CAPACITOR: 400 vdc, 10μμf capacitance, ±10% tolerance, metal case; Magnavox part/dwg 257910-4	Screen Coupling, V1301
C1302		Same as C714; p/o Z1302	Plate Bypass V1301
C1303		Same as C223; p/o Z1302	Grid Bias Charging, V1301
C1304	2	CAPACITOR, FIXED: mica dielectric; 22 mmf p/m 5%; 500 vdcw; Magnavox part/dwg 257853-17; p/o A1302	With C1308 Determines Frequency of Z1301 (See figure 6-38)
C1305	2	CAPACITOR, FIXED: paper dielectric; single sect; 10,000 mmf p/m 10%; 400 vdcw; vitamin Q impr; Sprague Type 81P10394S2; Magnavox part/dwg 257910-15	Plate Supply Filtering V1301 (See figure 6-38)
C1306		Same as C223; p/o A1302	Output Coupling from V1301 Plate (See figure 6-38)
C1307		Same as C1029	With C1309 Determines Frequency of Z1301 (See figure 6-38)
C1308		Same as C1307	With C1304 Determines Frequency of Z1301 (See figure 6-38)
C1309	3	CAPACITOR, VARIABLE: air dielectric; 4 plate meshing type, single sect; 3.4 to 50.4 mmf; 500 v AC peak; SLC; 1-1/32" lg from mtg surface o/a x 15/16" h x 25/32" wd excluding shaft 1/4" diam shaft flatted on 2 sides 17/32" lg w/ 9/32" lg thd 5/16-32 bushing flat on one side; extension shaft adj; 19 brass plates, nickel pl; 360 deg rotation either direction; ceramic ins; two solder post term for stator; one solder lug for rotor; single mtg hole 5/16-32 thd x 9/32" lg bushing; 0.039" diam pin in shaft 1/8" from end; moisture resistant; "Q" 500 min; Magnavox part/dwg 267818-1	With C1307 Determines Frequency of Z1301 (See figure 6-38)
E1301		CHASSIS AND PLUG ASSEMBLY: plastic terminal board includes terminals and receptacle; Magnavox part/dwg 208170-8	Base for Z1302

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
E1304	1	BOARD, TERMINAL: seven solder lug term; irregularly spaced; lam glass cloth, silicone resin board; 1-11/16″ lg x 1-3/16″ wd x 15/64″ thk o/a approx; two mtg holes #4–40 tap on 0.750″ mtg/c; marked w/C1305, R1301, C1304, C1306; Magnavox part/dwg 208133–1	Supports Resistors and Capacitors (See figure 6–38)
H1326		Same as H120 p/o A1302; chassis hold down screw	
H1327		Same as H1326 p/o A1302; chassis hold down screw	
H1328		Same as H1326 p/o A1302; chassis hold down screw	
H1329		Same as H1326 p/o A1302; chassis hold down screw	
H1331		Same as H139 p/o A1301	
J1301		Same as J702	Plug-in Connector, BFO Unit (See figure 6–38)
MP1301		PIN: brass; 5/32″ dia x 17/64″ lg; Magnavox part/dwg 118492–4 p/o A1302	
MP1302		Same as MP1015 p/o O1301	
MP1303		Same as MP121 p/o O1301	
MP1307		Same as MP1024 p/o A1302	Drives S1301
MP1308		Same as MP1013 p/o A1302	Bearing for MP1307
O1301		Same as A1007	Drives S1301
R1301		Same as R101	Plate Supply Decoupling V1301 (See figure 6–38)
R1302		Same as R1014; p/o Z1302	Cathode Resistor, V1301 (See figure 6–67)
R1303		Same as R154; p/o Z1302	Screen Load, V1301 (See figure 6–67)
R1304	2	RESISTOR, FIXED: comp; JAN type RC20BF223J; 22,000 ohms p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–191	Plate Load V1301 (See figure 6–67)
R1305		Resistor, same as R107 p/o Z1302	Grid Bias for V1301
S1301		Same as S1101B	Circuit Selection, BFO Unit (See figure 6–38)
V1301		Same as V201	BFO (See figure 6–67)
X1301		Same as X702	Socket for Z1302 (See figure 6–38)
Z1301	3	COIL, RF: BFO unit, one wnd; round copper shield can, cad pl; ceramic coil form, powdered iron core; adj iron core; scdr adj; marked w/Std Navy Stock No., and nom freq; BuShips spec 16T36; Magnavox part/dwg 367977–1	Resonant Circuit for BFO Unit (See figure 6–38)
Z1302		OSCILLATOR SUB-ASSEMBLY: provides mtg for tube and associated components of oscillator c/o one chassis, one connector, one latch, four capacitors C1303, C1304, C1305, C1306, five resistors R1301, R1302, R1303, R1304, R1305, one tube V1301 JAN 5840; 6.3 v 150 ma heater, 120 v DC; rectangular; 2-15/32″ lg x 1-1/4″ wd x 1-7/64″ thk o/a approx; mts by plugging into socket, held in place by latch located on top; Magnavox part/dwg 188008–1	Plug-in Sub-Assembly for BFO Unit (See figure 6–67)
A1403		COVER ASSEMBLY: c/o 1 cover, 2 bushings, 2 lockwashers, 2 screws, 2 aluminum washers, 1 insulator; Magnavox part/dwg 639282–1 p/o A1404	
A1404		CRYSTAL CALIBRATOR ASSEMBLY: 2-1/8″ w x 2-25/32″ h x 4-13/16″ lg o/a; Magnavox part/dwg 707945–1	(See figure 1–2)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
A1405		TERMINAL BD AND PLUG ASSEMBLY: 1.104″ w x 1.281″ h x 2-15/32″ lg o/a; Magnavox part/dwg 208170–6	Base for Z1401 (See figure 1–2)
A1406		TERMINAL BD AND PLUG ASSEMBLY: 1.104″ w x 1.281″ h x 2-15/32″ lg o/a; Magnavox part/dwg 208170–7	Base for Z1402 (See figure 1–2)
C1401		CAPACITOR, VARIABLE: ceramic dielectric; 8–50 mmf; 17/32″ wd x 3/4″ h x 19/32″ lg; Magnavox part/dwg 267820–3	Adjustment of Y1401 Frequency (See figure 6–39)
C1402		Same as C1054; p/o Z1401	Assists in feedback, V1401 (See figure 6–65)
C1403	3	CAPACITOR, FIXED: mica; 620 mmf p/m 2%; 500 vdcw; temp coef ltr F; Magnavox part/dwg 257818–62 p/o Z1401.	(See figure 6–65)
C1404	2	CAPACITOR, FIXED: JAN type CC21CH050D; ceramic; 5 mmf p/m 0.5 mmf; neg temp coef 0 (tol +60 −112) mmf/mf/° C; 500 vdcw; Magnavox part/dwg 257909–14; p/o Z1401	Output Coupling from V1401 Grid (See Figure 6-65)
C1405		Same as C254; p/o A1404	Plate Supply Filtering V1401 (See figure 6–39)
C1406	3	CAPACITOR, FIXED: mica; 510 mmf p/m 2%; 300 vdcw; characteristic E; spec JAN–C–5; Magnavox part/dwg 257853–31; p/o Z1401	Screen Bypass, V1402 (See figure 6–65)
C1407		Same as C254; p/o A1404	Plate Supply Filtering V1402 (See figure 6–39)
C1408		Same as C716; p/o Z1401	Output Coupling and Time Constant V1402 Plate (See figure 6–65)
C1409		Same as C102; p/o Z1402	Feedback Element, V1402 Plate Grid (See figure 6–66)
C1410		Same as C1409; p/o Z1402	Output Coupling and Time Constant V1402 Plate (See figure 6–66)
E1401	1	BOARD, TERMINAL: eight stud term; irregularly spaced; lam glass cloth, silicone resin board; 1-7/8″ lg x 1″ wd x 17/64″ thk; two #4–40 swaged mtg nuts 1-1/2″ c to c; mark in accordance; 3/32″ characters in black R1402, R1408, C1405, C1407; natural color board; Magnavox part/dwg 208120–1	Supports Resistors and Capacitors (See figure 6–39)
E1402	4	For reference only	Wiring Connection to Chassis (See figure 6–39)
E1403	4	For reference only	Wiring Connection to Chassis (See figure 6–39)
E1404	4	For reference only	
H1412		Same as H725: chassis hold down screw; p/o A1404	(See figure 6–19)
H1413		Same as H7412: chassis hold down screw; p/o A1404	(See figure 6–19)
H1414		Same as H1412: chassis hold down screw; p/o A1404	(See figure 6–19)
H1425		Same as H139: cover retaining screw; p/o A1403	
H1426		Same as H1425: cover retaining screw; p/o A1403	
J1401		Same as J702	Plug-in Connector, Calibrator Unit (See figure 6–39)
MP1401		HANDLE: brass; .063″ thk x 1/2″ wd x 4-19/32″ lg; Magnavox part/dwg 737991 p/o A1404	(See figure 6–19)
MP1403		Same as MP714: Retains crystal Y1401 p/o A1404	(See figure 6–18)
R1401		Same as R703 p/o Z1401	Grid Leak V1401 (See figure 6–65)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
R1402		Same as R101	Plate Supply Decoupling, V1401 (See figure 6–39)
R1403	2	RESISTOR, FIXED: comp; JAN type RC20GF563J; 56,000 ohms p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–201; p/o Z1401	Plate Load, V1401 (See figure 6–65)
R1404		Same as R103; p/o Z1401	#3 Grid Leak V1402 (See figure 6–65)
R1405	2	RESISTOR, FIXED: comp; JAN type RC20GF184J; 180,000 ohms p/m 5%; 1/2 w; spec JAN–R–11; Magnavox part/dwg 237814–213	Cathode Resistor V1402 (See figure 6–65)
R1406		Same as R1402; p/o Z1402	#1 Grid Leak V1402 (See figure 6–65)
R1407		Same as R260; p/o Z1402	Screen Decoupling V1402 (See figure 6–65)
R1408		Same as R1402	Plate Supply Decoupling V1402 (See figure 6–39)
R1409		Same as R1407; p/o Z1402	Plate Lead V1402 (See figure 6–66)
R1410		Same as R1405; p/o Z1402	P/o Multivibrator Time Constant Network, V1402 (See figure 6–66)
R1411	3	RESISTOR, VARIABLE: comp; 5000 ohms ±20%; 0.5 w; 40°C max continuous oper; three solder lug term; enclosed metal case 3/4″ diam x 3/8″ d; round metal shaft 7/16″ lg x 1/8″ diam w/slotted end; std "A" taper; ins contact arm, no off position; torque not less than 3/4 oz in. nor more than 6 oz in.; bushing 1/4″–32 x 1/4″ lg, non-turn device located on 3/8″ radius at 9 o'clock; Magnavox part/dwg 227836–1	Cathode Resistor V1401 (See figure 6–39)
V1401		Same as V1007 p/o Z1401	Crystal Oscillator, Type I (See figure 6–65)
V1402		Same as V1004 p/o Z1402	Multivibrator, Type I Calibrator (See figure 6–66)
X1401		Same as X702	Socket for Z1401 (See figure 6–39)
X1402		Same as X1401	Socket for Z1402 (See figure 6–39)
X1403		Same as X701	Socket for Y1401 (See figure 6–39)
Y1401	3	CRYSTAL UNIT, QUARTZ: one xtal plate; 50 kc; operable temp range −40°C to +85°C; two pins spaced on bottom 0.486″ c to c; solid pins 0.050″ diam x 0.243″ lg; oval shape body, 1.538″ lg x 0.750″ wd x 0.345″ thk; Magnavox part/dwg 537862–1	Crystal for Calibrator
Z1401	3	FREQUENCY CALIBARTOR SUB-ASSEMBLY: provides mtg for tube and associated components of freq calibrator; c/o one chassis, one connector, one latch, three capacitors C1402, C1403, C1404, four resistors R1401, R1402, R1403, R1404, one tube V1401 JAN 5718; 6.3 v 150 ma heater, 120 v DC; rectangular 2-15/32″ lg x 1-1/4″ wd x 1-7/64″ thk o/a approx; mts by plugging into socket, held in place by latch located on top; when used w/o external xtal constitutes 50 kc osc circuit; Magnavox part/dwg 188017–1	Plug-in Sub-Assembly, Type I Calibrator (See figure 6–65)

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
Z1402	3	FREQUENCY CALIBRATOR SUB-ASSEMBLY: provides mtg for tube, and associated components of freq calibrator; c/o one chassis, one connector, one latch, four capacitors C1406, C1407, C1409, C1410, six resistors, R1405, R1406, R1407, R1409, R1410, R1412, one tube V1402 JAN 5636; 6.3 v 150 ma heater, 120 v DC; rectangular; 2-15/32" lg x 1-1/4" wd x 1-7/64" thk o/a approx; mts by plugging into socket; held in place by latch located on top; when used w/approp. external elements constitutes 10 kc oscillator; provision is made for synchronizing 2/50 kc osc; Magnavox part/dwg 188018-1	Plug-in Sub-Assembly, Type I Calibrator Multivibrator (See figure 6-66)
A1603		POWER SUPPLY ASSEMBLY: c/o 1 rectifier stage, oscillator heater regulators, regulated B(+) plus supply, 1 power transformer; Magnavox part/dwg 707954-2	(See figure 6-6)
A1609		COVER ASSEMBLY: c/o 1 cover assembly, 6 screws, 12 washers, 2 guide pins; Magnavox part/dwg 639625-3 p/o A1603	
A1612		RECTIFIER, SEMICONDUCTOR DEVICE: center tap circuit, ref. dwg group 23; single phase, full-wave rectification; 560 v rms max. input rating; 250 ma max dc current output rating; inductive load type; 490 vdc max output rating; also included on assy are 2 diodes connected back-to-back for ac voltage filament regulation Magnavox part/dwg 708468-1 p/o A1603	
CR1601		SEMICONDUCTOR DEVICE: Diode type 1N540; Magnavox part/dwg 617834-7 p/o A1612	Rectifies plate supply voltage (See figure 6-40)
CR1602		Same as CR1601 p/o A1612	(See figure 6-40)
CR1603		Same as CR1601 p/o A1612	(See figure 6-40)
CR1604		Same as CR1601 p/o A1612	(See figure 6-40)
C1601	3	CAPACITOR, FIXED: JAN type CE51C121P; dry electrolytic, polarized; single sect; 120 mf; 350 vdcw; working temp range −40°C to +85°C; spec JAN-C-62; Magnavox part/dwg 277803-3	With L1601 Filters Rectified Current
C1602		Same as C1601	With L1601 Filters Rectified Current
C1603	2	CAPACITOR, FIXED: JAN type CP29AIEF-103M; paper dielectric; single sect; 10,000 mmf p/m 20%; 600 vdcw; HS metal case; spec JAN-C-25; Magnavox part/dwg 257819-12	Filters Output from V1603 (See figure 6-40)
F1601	3	FUSE, CARTRIDGE: 1 amp, 125 v; time delay 135% for 0-1 hr and 200% for 60 sec max, 5 sec min; two 1/4" diam ferrule type term; glass body; indicating; 1-1/4" lg x 1/4" diam o/a; Littelfuse Inc. Cat #313001 Type 3AG; Magnavox part/dwg 185074-86	Primary Power Fuse
F1602		Same as F1601	Primary Power Fuse
H1626		SCREW: stainless steel, round head, cross recess drive; Magnavox part/dwg 108324-105 p/o A1603	Chassis Hold Down Screw
H1627		Same as H1626 p/o A1603	
H1628		Same as H1626 p/o A1603	
H1629		Same as H1626 p/o A1603	
J1601	3	CONNECTOR, RECEPTACLE: 18 round male cont, pol; straight type; 2-23/32" lg x 1-3/32" wd x 1-5/32" thk o/a; 10 amp; rectangular plastic body; two #6-32 x 3/8" lg mtg studs on 2-5/32" mtg/c; term and cont identified by ltr; Winchester Electronics Co. Cat #QRE18P-2; Magnavox part/dwg 187990-3	Plug-in Connector, Power Unit (See figure 6-40)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
L1601	3	REACTOR: filter choke; dual; term 1 and 2, 5 hy 119 ma; term 2 and 3, 5 hy 104 ma; 160 ohms DC resistance; 1300 v RMS test; HS metal case; 1-29/32″ lg x 1-7/8″ wd x 4-3/4″ h; four #8–32 mtg studs 3/8″ lg on 1-9/32″ mtg/c; three wire leads on top; marked w/vendor's name, Std Navy Stock No., and Magnavox part/dwg #; oper temp range −55°C to +85°C; and pertinent electrical information; spec MIL–T–27; Magnavox part/dwg 327871–1	With C1601, C1602, Filters Rectified Current (See figure 6–40)
MP1616		CLAMP, CABLE: Magnavox part/dwg 108287–4 p/o A1603	(See figure 6–7)
MP1619		PIN, GUIDE, COVER: brass per SAE72; 0.187″ dia, 0.688″ lg overall dim; Magnavox part/dwg 115235–2 p/o A1603	
MP1620		Same as MP1619	
MP1621		WASHER, NONMETALLIC: nylon; 0.052″ thk, 0.096″ id, 0.1875″ od; Magnavox part/dwg 107218–7 p/o A1603	
MP1622		Same as MP1621	
MP1623		Same as MP1621	
MP1624		Same as MP1621	
MP1625		Same as MP1621	
MP1626		Same as MP1621	
O1601		Same as O101; p/o E1601	Transfer Link, Antenna Circuit
R1601	2	RESISTOR, VARIABLE: comp; 500 ohms p/m 20%; 2 w; three solder lug term; enclosed metal case 1-1/16″ diam x 9/16″ d; slotted metal shaft 1/4″ diam x 1/2″ lg from mtg surface; linear taper; ins cont arm, w/o off position; normal torque; 3/8″–32 x 3/8″ lg mtg bushing, non-turn device located on 17/32″ rad at 3 o'clock; oper temp range −50°C to +100°C; will withstand 1000 v between term and mtg bushing for 1 min, and 100-hr salt spray; term hot tin dipped; marked w/ Magnavox part/dwg #; will withstand acceleration of 8G; AB Type JU5012, SD3032; Magnavox part/dwg 227838–4	Hum-Bucking Adjustment V1101 Heater Circuit (See figure 6–40)
R1602		RESISTOR, FIXED: comp; MIL type RC42GF393J; 39,000 ohms p/m 5%; 2 w; spec JAN–R–11A; Magnavox part/dwg 237816–197; p/o A1603	Bleeder for C1601 and C1602 (See figure 6–40)
R1603	2	RESISTOR, FIXED: WW; JAN type RW21J–402; 4000 ohms p/m 5%; 12.5 w; Magnavox part/dwg 247853–10	Voltage Dropping for V1603 (See figure 6–40)
R1604	2	RESISTOR, FIXED; WW; JAN type RW21J601; 600 ohms p/m 5%; 12.5 w at 200°C; Magnavox part/dwg 247853–21	Voltage Dropping for Plate Supply Voltage (See figure 6-40)
R1607		RESISTOR, FIXED: Wire wound, 31 ohms, chassis mounting; Magnavox part/dwg 245002–54	(See figure 6–40)
T1601	3	TRANSFORMER, POWER: filament and plate type; 125 v input, tapped for 115 v, and 105 v, 60 cyc single phase; 3 output wnd; secd #1, 460 v at 119 ma RMS CT; secd #2, 20.8 v w/ taps for 6.4 v at 5 amp CT, 14.4 v at 150 ma and 6.4 v at 9 ma, secd #3, 5.3 V at 270 ma; air coolant, impr in accordance w/ MIL–T–27 for Grade 1 Class A; HS metal case; 4-13/16″ lg x 3-17/32″ wd x 3-1/32″ thk; 14 solder lug term 9/16″ h on top of case; four #8–32 x 7/16″ lg mtg studs on 2-1/2″ x 2-1/4″ mtg/c; derated for 85°C ambient temp, family 03, electrostatic shield between pri and secd; Magnavox part/dwg 307804–1	Supplies Plate and Heater Voltage (See figure 6–40)
VR1601		SEMICONDUCTOR DEVICE, DIODE: type SV2007; Magnavox part/dwg 615003–325 p/o A1612	Rectifies Plate Supply Voltage (See figure 6–40)
VR1602		Same as VR1601 p/o A1612	
VR1603		SEMICONDUCTOR DEVICE, DIODE: Type 1374A; Magnavox part/dwg 615003–324 p/o A1603	Voltage Regulator

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
X1601	2	SOCKET, TUBE: octal; JAN type TS101P01; spec JAN-S-28A, Amendment 1; Magnavox part/dwg 185101-1	Socket for C1601 (See figure 6-40)
X1602		Same as X1601	Socket for C1602 (See figure 6-40)
X1606	3	FUSE HOLDER: extractor post type; for single 3 AG fuse, 1-1/4" lg x 1/4" diam; bakelite case; 2-9/64" lg x 11/16" diam; 1/2"-24 thd x 1/2" lg mtg, mts in hole 1/2" diam w/ flat on one side to 0.473"; two solder lug term; screw cap marked w/ word fuse, mtg hdw, neoprene washer and zinc pl nut; Bussman Type HKP; Magnavox part/dwg 188176-1	Socket for F1601 (See figure 6-40)
X1607		Same as X1606	Socket for F1602 (See figure 6-40)
A1701		FILTER ASSEMBLY: c/o 1 chassis, 2 brackets, 2 cover assy, 6 connectors, 3 filters, 2 receptacle-hood; Magnavox part/dwg 707966-1	Mounted in case
A1707		COVER ASSEMBLY: c/o 1 cover assy, 8 contact springs, 36 rivets, 12 washers, 12 screws, 12 lockwashers, 12 bushings; Magnavox part/dwg 639519-3 p/o A1701	
A1710		COVER ASSEMBLY: c/o 1 cover, 1 insulator, 6 nuts; Magnavox part/dwg 639478-3 p/o A1701	
E1701	3	COVER: AN type MX-195/U; holds cable; brass; Army spec 57-160 annealed; silver pl; 0.875" lg x 0.687" sq flange, four 0.1094" diam mtg holes on 0.500" x 0.500" mtg/c; holds cable up to 0.219" max diam; weather proof, non-constant impedance; American Phenolic Corp.; Navy spec RE49F244; Magnavox part/dwg 187978-2	Supports Cabling to J1705, J1786 (See figure 6-41)
E1702	3	SHELL, ELECTRICAL CONNECTOR: Navy type C-49193; brass, silver pl; cylindrical w/ sq flange; 1" lg x 1" wd x 3/4" h o/a approx; four mtg holes in flange 0.125" diam on 0.719" mtg/c; marked w/ Navy type # prefixed by mfr prefix ltr; four holes 0.125" diam equally spaced in top of cover and solder dipped to 3/16" minimum, 0.345" diam cable opening; Magnavox part/dwg 187977-3	Supports Cabling to J1707 (See figure 6-41)
E1705		Same as E281 p/o A002	Assists in Wiring J1709 (See figure 6-41)
E1706	1	ADAPTER, SHAFT: for connecting 0.234" dia shaft to 0.345" ID hole; brass, hot solder dip; hollow tube shape w/ centrally located collar; 15/32" lg x 1/4" OD o/a; has 0.234" ID ctr hole, one end 0.281" OD w/ four equally spaced slots, has 3/8" OD x 1/32" lg shoulder spaced 3/16" from slotted end, other end 0.345" OD; Magnavox part/dwg 118430-4	Assists in Wiring J1709 (See figure 6-41)
E1708		Same as E282 p/o A002	Adapts Coaxial Cable RG-122/U to J1709 (See figure 6-41)
E1709	5	INSULATOR BUSHING: tubular; lam phenolic tubing (Fed spec HH-P-256 Type 1 Grade XX); 3/8" lg; voltage not rated; 0.187" OD x 0.105" ID; ends chamfered 45 deg; Magnavox part/dwg 448332-2	Adapts Coaxial Cable RG-122/U to J1709 (See figure 6-41)
J1701	3	CONNECTOR, RECEPTACLE: AN type AN-3102A-10SL4P; two round male cont #20 AWG; straight type; 1-1/4" lg x 1" sq o/a; cylindrical aluminum body w/ sq mtg flange, molded melamine insert; four 0.120" diam mtg holes on 23/32" mtg/c; solid shell, std key position; pol; spec MIL-C-5015; Magnavox part/dwg 187985-4	Connection for Audio Output (See figure 6-41)
J1702		Same as J1701	Connection for Audio Output (See figure 6-41)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
J1704	3	CONNECTOR, RECEPTACLE: AN type AN–3102A–16S–5P; three round male cont #16 AWG; straight type; 1-3/8″ lg x 1-9/32″ sq o/a; cylindrical aluminum body w/ sq mtg flange; molded melamine insert; four 0.120″ diam mtg holes on 31/32″ mtg/c, solid shell, pol; std key position, spec. MIL–G–5015 Magnavox part/dwg 187936–5	Connection to Primary Power Source (See figure 6–41)
J1705	2	CONNECTOR, RECEPTACLE: AN type UG–290/U; one round female cont; straight type; 1-1/32″ lg x 0.375″ OD w 11/16″ sq mtg flange; 50 ohms nom RF impedance; cylindrical brass silver pl body w/ sq mtg flange; thermosetting polymer insert; accommodates solid dielectric coax cable, 0.206″ OD w/ #20 AWG inner cond; four #3–56 tapped mtg holes on 1/2″ x 1/2″ mtg/c; electrolytic protective coating on all silver surfaces; incl two studs for bayonet type connection to male connector; Amphenol Type UG–290/U; Navy DWG RE49F331; Magnavox part/dwg 187863–1	Connection to FSK of Auxiliary Apparatus (See figure 6-41)
J1707	2	CONNECTOR, RECEPTACLE: AN type UG–58/U; one round female contact; straight type; 1-3/32″ lg x 5/8″ diam w/ 1″ sq mtg flange; 50 ohms impedance; cylindrical brass body; four 1/8″ diam mtg holes on 23/32″ x 23/32″ mtg/c; spec JAN–C–71; Magnavox part/dwg 187980–1	Connection to Antenna (See figure 6–41)
J1709	3	CONNECTOR, RECEPTACLE: 14 round female cont; straight type; 3-3/8″ lg x 1-11/16″ wd x 1-7/8″ thk; small cont 10 amp, medium cont 15 amp, large (coax) 10 amp; rectangular aluminum body; mica-filled phenolic insert; four 0.152″ diam cak mtg holes on 2-7/8″ x 1″ mtg/c; one coax cont has 90 deg offset for attaching to cable; Magnavox part/dwg 187981–4	Plug-in Connection to Receiver Chassis (See figure 6–41)
K1701		RELAY, THERMAL: cont arrangement 1B; 20 v 1 amp; cont material palladium; 1-5/8″ lg x 1-1/16″ wd x 19/32″ thk o/a; mts by four 0.140″ diam holes on 0.687″ x 0.812″ mtg/c; slow acting; shall open in one sec or less for any current exceeding 150 ma and shall be continuously adj to a min oper current at 100 ma; Magnavox part/dwg 167898–1	Protects Antenna Input Circuits
MP1701		BUSHING: 11/16″ diam x 9/32″ lg; Magnavox part/dwg 118394–4 p/o A1701	
MP1702		SPACER: 1/4″ diam x 1/2″ lg; Magnavox part/dwg 118416–2 p/o A1701	
MP1703		Same as MP1702 p/o A1701	
MP1704		SPACER: 1/4″ diam x 7/8″ lg; Magnavox part/dwg 118416–4 p/o A1701	
MP1705		Same as MP1704 p/o A1701	
MP1706		Same as MP1704 p/o A1701	
MP1707		Same as MP1704 p/o A1701	
MP1709		BUSHING: 11/32″ max diam x 5/32″ lg; Magnavox part/dwg 118408–4 p/o A1701	
MP1710		Same as MP1709 p/o A1701	
MP1711		Same as MP1709 p/o A1701	
MP1712		Same as MP1709 p/o A1701	
MP1726		SPRING, CONTACT: beryllium copper, Navy Spec. 46C10, nickel plated; Magnavox part/dwg 639373–2 p/o A1707	
MP1727		Same as MP1726 p/o A1707	

TABLE 7-1. RADIO RECEIVING SET AN/SRR-11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
MP1728		Same as MP1726 p/o A1707	
MP1729		SPRING, CONTACT: Beryllium copper, Navy Spec. 46C10, nickel plated; Magnavox part/dwg 639373-4 p/o A1707	
MP1730		Same as MP1729 p/o A1707	
MP1731		Same as MP1729 p/o A1707	
MP1732		SPRING, CONTACT: beryllium copper, Navy Spec. 46C10, nickel plated; Magnavox part/dwg 639373-6 p/o A1707	
MP1733		Same as MP1732 p/o A1707	
MP1734		COVER: 1-15/16″ wd x 2-1/16″ lg x 3/4″ thk; Magnavox part/dwg 639357-2 p/o A1701	
Z1701	3	FILTER, LOW PASS: pass band between 175 and 225 kc; 3-3/4″ max lg x 3-5/8″ wd x 1-9/16″ max thk o/a; 200 ohms input and 70 ohms output impedance; rectangular metal case; four 0.173″ diam mtg holes on 3-1/8″ x 1-3/4″ mtg/c; four solder lug term; two on ea end; grade, class, schematic and pertinent electrical information; unbalanced w/ respect to gnd; capable of withstanding long periods of arctic and tropical service; Magnavox part/dwg 327869-1	Filters Output Circuit from 2nd IF (See figure 6-41)
Z1702	3	FILTER, LOW PASS: pass band from 0 to 400 cyc rejection band 14 kc to 400 mc; 5-1/2″ lg x 2-15/16″ wd x 1-9/16″ thk o/a, power line filter; rectangular metal case; four 0.173″ diam mtg holes on 4-3/8″ x 2-9/16″ mtg/c; six solder lug term two on ea side and one on ea end; grade, class, schematic and pertinent electrical information, the filter shall be balanced with respect to gnd, the cap to gnd shall be as small as practicable; capable of withstanding long periods of arctic and tropical service; Magnavox part/dwg 327867-1	Filters Power Line Circuit (See figure 6-41)
Z1703	3	FILTER, LOW PASS: 8000 cyc cut-off; 5-5/16″ lg x 2-5/8″ wd x 1-9/16″ h; 50 ohms input and output impedance; rectangular metal case; four 0.173″ diam mtg holes on 4-13/16″ x 1-7/8″ mtg/c; six solder lug term, three on ea end, ctr term are gnd; oper temp range −54°C to +85°C; grade, class, schematic and, pertinent electrical information; Magnavox part/dwg 327866-1	Filters Audio Output Circuit (See figure 6-41)
E2202		Same as H108 p/o E135	
E2222		Same as MP137; p/o A121	
H2628		Same as H298	Friction device for tilt mechanism latch
H2635		WASHER, SPRING: Phosphor bronze 0.010 in. thk., 5/8 in. dia, dull nickel finish; Magnavox part/dwg 108392-202	Friction device for freq vernier knob, E273
H2636		Same as H2635	Friction device for RF gain control, E285
H2637		Same as H2635	Friction device for Antenna Comp. knob, E284
H2642		SCREW, EXTERNALLY RELIEVED BODY: brass per Navy Specification 47B2n; no. 8-32 thd 21/32″ lg; 1-3/8″ overall length of screw; Magnavox part/dwg 118361-2	Mirror adjusting screw
H2684		BUSHING, NYLON: Magnavox part/dwg 448252-1	Receives guide Pin (See figure 6-29)

TABLE 7–1. RADIO RECEIVING SET AN/SRR–11A, MAINTENANCE PARTS LIST (Cont.)

REF. DESIG.	NOTES	NAME AND DESCRIPTION	LOCATING FUNCTION
H2685		Same as H2684	
H2991		SPRING, Music wire: Cadmium plated, 13 turns, 1 in. lg, Magnavox part/dwg 108361–2	Holder for H261
H2992		Same as H2991	Holder for H262
H2993		Same as H2991	Holder for H263
H2994		Same as H2991	Holder for H264
H3017		SCREW, STAINLESS STEEL: Magnavox part/dwg 108324–109	Supports dial assembly, A601
H3018		Same as H3017	Supports dial assembly, A601
E3604		TERMINAL: brass, 0.025″ thk; spec QQ–B–611A; Magnavox part/dwg 208162–2	See figure 6–11; item 74 and figure 6–42
E3605		Same as E3604	
I3601		LAMP: min bayonet base; 0.400 amp; 2.000 mean spherical cp; Magnavox part/dwg 185023–1 p/o A612	Spare projection lamp for A609
I3602		Same as I3601	Projection lamp for A609
O3619		ACTUATOR, MICRO: stainless steel; c/o 2 #4 screws, nuts and lockwashers; Magnavox part/dwg 437814–1	
R3601	2	RESISTOR, VARIABLE: comp; 50 ohms p/m 20%; 2 w; three solder lug term; enclosed metal case 1-1/16″ diam x 9/16″ d; round metal shaft 1/4″ diam x 3/4″ lg from mtg surface; linear taper; ins contact arm, w/o off position; normal torque; 3/8″–32 x 3/8″ lg mtg bushing, non-turn device located on 17/32″ rad at 3 o'clock; oper temp range −50°C to +100°C; will withstand 1000 v between term and mtg bushing for 1 min, and 100 hr salt spray; term hot tin dipped, AB Type JU5002, P3048; Magnavox part/dwg 227838–1	Regulates Intensity of Projection Lamps (See figure 6–42 and figure 6–11 Item 10)
R3602	2	RESISTOR, FIXED: comp; MIL type RC20GF470J; 47 ohms p/m 5%; 1 w; spec MIL–R–11A; Magnavox part/dwg 237831–127	Supplements R3601 (See figure 6–42 and 6–11, item 11)
S3601	2	SWITCH, SENSITIVE: SPDT; 10 amp, 115 v; plastic case; 1-3/32″ lg x 5/8″ wd x 13/32″ h o/a; plunger actuated; 5/8″ from ctr mtg hole to free position of actuator; 11/64″ lg x 7/64″ wd x 7/64″ h plunger; 6 to 14 oz. oper pressure; 0.006″ to 0.016″ movement differential; 3/64″ max pretravel; 1/32″ min overtravel; momentary; solder lug term, hot solder dipped; one 0.114″ diam mtg hole and one 0.114″ wd mtg hole x 0.126″ lg on 0.875″ x 0.406″ mtg/c; flat bosses around mtg holes for stack mtg; spec MIL–S–6743; Micro Switch V3–1; Magnavox part/dwg 167892–1	Shifts "Normal"/"Spare" Lamp Connections (See figure 6–42 and figure 6–11, item 91)
X3601	2	LAMPHOLDER: miniature bayonet type; brass body; 10 v; 1/2 amp; 1-5/8″ lg x 3/4″ wd x 1-1/8″ h o/a approx; two mtg holes 1/8″ wd x 1/4″ lg on 5/8″ mtg/c; socket is on right side when mtd; mtg bkt located perpendicular to and beside socket; socket position is adj by means of set screw adj has spring return; Magnavox part/dwg 187968–1 p/o A612	Socket for I3601 (See figure 6–42)
X3602	2	LAMPHOLDER: miniature bayonet type; brass body; 10 v, 1/2 amp; 1-5/8″ lg x 3/4″ wd x 1-1/8″ h o/a approx; two mtg holes 1/8″ wd x 1/4″ lg on 5/8″ mtg/c; socket is on left side when mtd; mtg bkt located perpendicular to and beside socket; socket position is adj by means of set screw; adj has spring return; Magnavox part/dwg 187968–2 p/o A612	Socket for I3602 (See figure 6–42)

TABLE 7–2. RADIO RECEIVING SET AN/SRR–11A, STOCK NUMBER IDENTIFICATION

REF. DESIG.	NOTES	STOCK NUMBERS			
		FEDERAL	STANDARD NAVY	SIGNAL CORPS	USAF
A001		F5820–775–6015			
A1602			N16–S–34599–7750		
A270			N16–H–150001–337		
CR1001			N16–T–51769		
C1001	2		N16–C–28737–7001		
C101	2		N16–C–45768–8089		
C102			N16–C–29713–6603		
C1029			N16–C–64040–2000		
C103			N16–C–59365–1938		
C1030	2		N16–C–42733–5753		
C1031	2		N16–C–43633–3542		
C1032	2		N16–C–42733–5753		
C104	2		N16–C–44111–1231		
C1042			N16–C–31833–7866		
C1043			N16–C–17822–5695		
C1047			N16–C–41064–1134		
C1048	2		N16–C–26838–5145		
C1050			N16–C–30188–3727		
C1052			N16–C–30114–3006		
C1053	2		N16–C–45770–1812		
C1055	2		N16–C–45770–1812		
C106			N16–C–29370–7461		
C1063	2		N16–C–45773–8071		
C107	2		N16–C–42733–5753		
C108	2		N16–C–40120–4737		
C1101	2		N16–C–46200–7572		
C1102	2		N16–C–43633–3542		
C1103			N16–C–39693–5927		
C1107	2		N16–C–44111–1231		
C1108			N16–C–40024–4700		
C1112			N16–C–45770–1522		
C126			N16–C–16245–8001		
C128			N16–C–58716–4907		
C130	2		N16–C–41052–5966		
C1304			N16–C–26838–5145		
C1305	2		N16–C–42733–5753		
C1309			N16–C–60027–1001		
C132	2		N16–C–16237–2583		
C133	2		N16–C–42807–4012		
C136	2		N16–C–44111–1231		
C139	2		N16–C–42733–5753		
C1403			N16–C–30367–9395		
C1404	2		N16–C–15624–4666		
C1406			N16–C–30183–1890		
C142			N16–C–99999–1130		
C143			N16–C–15953–2999		
C155			N16–C–16149–5001		
C1601			N16–C–20267–5896		
C1602	2		N16–C–46200–7572		
C1603	2		N16–C–42736–4235		
C162	2		N16–C–45770–1812		
C201			N16–C–99999–1131		
C202			N16–C–16363–7679		
C203			N16–C–15955–9916		
C205			N16–C–99999–1132		
C206			N16–C–16139–5946		
C207			N16–C–15967–8367		
C209			N16–C–99999–1133		
C210			N16–C–16172–9403		
C211			N16–C–28547–6325		
C214			N16–C–29084–4698		
C215			N16–C–29259–8168		
C217			N16–C–99999–1134		
C218			N16–C–16076–9386		
C219			N16–C–28716–1433		

TABLE 7–2. RADIO RECEIVING SET AN/SRR–11A, STOCK NUMBER IDENTIFICATION (Cont.)

REF. DESIG.	NOTES	STOCK NUMBERS			
		FEDERAL	STANDARD NAVY	SIGNAL CORPS	USAF
C223			N16–C–30109–3330		
C224			N16–C–40358–1930		
C251			N16–C–63536–1001		
C252			N16–C–49983–2357		
C254			N16–C–45770–1812		
C710			N16–C–64040–1181		
C711	2		N16–C–45773–7301		
C714			N16–C–29898–3409		
C716			N16–C–26601–1443		
C717			N16–C–28210–1404		
C718	2		N16–C–45768–8089		
C719	2		N16–C–45768–8089		
C723			N16–C–29449–8642		
C812			N17–C–29113–3841		
C813			N16–C–27181–4341		
C814			N16–C–29608–2009		
E103			N17–B–77936–2407		
E130			N17–B–77691–3814		
E1302			N17–T–26653–4296		
E153			N17–B–77690–4910		
E1701			N17–C–945001–202		
E1702			N17–S–250051–154		
E701			N17–T–26623–4296		
E1601			N17–F–14310–380		
H261			GF5120–242–7410		
H262			GF5120–224–2504		
H263			GF5120–198–5398		
H264			GM5120–198–5401		
H265			N16–T–750286–393		
H266			N16–T–751254–406		
I251			GF6240–223–9100		
J1002			N17–C–73605–6389		
J101			N17–C–73572–8047		
J102			N17–C–73185–2849		
J103			N17–C–72357–3744		
J127			N17–C–73126–3839		
J1601			N17–C–73606–7745		
J1701			N17–C–72595–1800		
J1704			N17–C–72604–4794		
J1705	2		N17–C–73108–2878		
J1707	2		N17–C–73108–5906		
J1709			N17–C–73304–1318		
J252			N17–C–73288–1712		
J256			N17–C–73162–2774		
J257			N17–C–73242–6015		
J259			N17–C–73317–2189		
J263			N17–C–73317–6429		
J264			N17–C–73591–1360		
J265	2		N17–J–39248–4418		
J701			N17–C–73459–9862		
J702			N17–C–73531–3457		
K1701			N17–T–99999–0199		
L1013			N16–C–76727–7769		
L1601			N16–R–29792–1061		
L201			N16–C–76780–2846		
L202			N16–C–76736–6086		
L203			N16–C–76729–6401		
L204			N16–C–76748–1800		
L205			N16–C–74123–3251		
L251			N16–C–99999–0045		
L252			N16–R–28800–2904		
MP429			N16–S–470001–129		
MP430			N16–S–470001–128		
M251			N17–M–18982–9120		
M252			N17–M–22713–3543		

TABLE 7–2. RADIO RECEIVING SET AN/SRR–11A, STOCK NUMBER IDENTIFICATION (Cont.)

REF. DESIG.	NOTES	STOCK NUMBERS			
		FEDERAL	STANDARD NAVY	SIGNAL CORPS	USAF
O106			N16–L–99999–0046		
O255			N16–R–33591–1335		
O257			N16–G–431136–114		
O269			N16–M–250606–646		
O272			GM3110–100–6209		
R1001			N16–R–99999–0037		
R1003	2		N16–R–50416–435		
R1004	2		N16–R–50164–435		
R1005	2		N16–R–50992–275		
R1108	2		N16–R–50335–438		
R1009	2		N16–R–50362–433		
R101	2		N16–R–50011–438		
R1014			N16–R–49922–811		
R102	2		N16–R–49939–271		
R1023	2		N16–R–50012–811		
R1027	2		N16–R–50443–438		
R1028	2		N16–R–50821–276		
R1029	2		N16–R–51136–438		
R103	2		N16–R–49768–438		
R104	2		N16–R–49660–438		
R105			N16–R–49598–811		
R106			N16–R–51064–435		
R107	2		N16–R–50632–416		
R108	2		N16–R–49687–321		
R109	2		N16–R–50128–438		
R1102	2		N16–R–50587–435		
R1103	2		N16–R–50650–390		
R1104	2		N16–R–50740–380		
R1106	2		N16–R–49876–438		
R1108	2		N16–R–51019–440		
R1111	2		N16–R–50398–131		
R1115	2		N16–R–50632–416		
R1116	2		N16–R–50677–380		
R1117	2		N16–R–50758–377		
R1119	2		N16–R–50038–438		
R1120	2		N16–R–50659–433		
R1121	2		N16–R–50740–380		
R1126	2		N16–R–50092–438		
R1136	2		N16–R–49840–435		
R1137	2		N16–R–51172–438		
R129	2		N16–R–50479–435		
R130			N16–R–49822–438		
R1304	2		N16–R–50371–433		
R131	2		N16–R–50587–435		
R1401	2		N16–R–50974–438		
R1403	2		N16–R–50515–433		
R1405	2		N16–R–50695–436		
R1411			N16–R–87521–8010		
R151	2		N16–R–49579–131		
R153	2		N16–R–49688–811		
R154	2		N16–R–50398–131		
R155	2		N16–R–49768–438		
R1601			N16–R–50371–433		
R1602	2		N16–R–50444–131		
R1603	2		N16–R–R66214–8991		
R1604	2		N16–R–65846–3940		
R1605			N16–R–85002–6871		
R201	2		N16–R–50416–435		
R204			N16–R–50822–811		
R251			N16–R–88919–1361		
R253	2		N16–R–49462–438		
R254	2		N16–R–50092–438		
R255	2		N16–R–49939–271		
R257			N16–R–89219–1001		
R258			N16–R–87852–5365		
R260	2		N16–R–50308–438		

TABLE 7-2. RADIO RECEIVING SET AN/SRR-11A, STOCK NUMBER IDENTIFICATION (Cont.)

REF. DESIG.	NOTES	STOCK NUMBERS			
		FEDERAL	STANDARD NAVY	SIGNAL CORPS	USAF
R3601	2		N16-R-87012-5430		
R3602	2		N16-R-49426-716		
R702	2		N16-R-50281-438		
R703	2		N16-R-50974-438		
R705	2		N16-R-50236-438		
S1001			N17-S-91897-8968		
S101			N17-S-65233-6617		
S102			N17-S-69074-4589		
S1101	2		N17-S-63719-3559		
S126	2		N17-S-91897-8969		
S251			N17-S-73082-9028		
S252			N17-S-74139-4844		
S253			N17-S-70777-8626		
S254			N17-S-59672-7885		
S255			N17-S-60080-3251		
S3601			N17-S-69085-2701		
S701			N17-S-61615-1001		
T101			N17-C-99999-0070		
T1011			N17-T-67517-4374		
T1013			N17-T-67517-4469		
T1014			N16-C-99999-0055		
T102			N17-T-81385-1533		
T103			N17-T081403-1422		
T104			N17-T-81406-1515		
T105			N17-T081412-1526		
T1101			N17-T-64402-5501		
T126			N16-C-99999-0051		
T127			N17-T-81385-1535		
T128			N17-T081403-1420		
T129			N17-T-81406-1517		
T130			N17-T-81412-1536		
T151			N17-T-81746-5804		
T152			N17-T-81385-1537		
T153			N17-T-81403-1501		
T154			N17-T-81406-1527		
T155			N16-C-99999-0047		
T1601			N17-T-73701-5366		
T703			N17-T-67517-4424		
V1005			N16-T-75647		
V101			N16-T-78599		
V1104			N16-T-75719		
V1109			N16-T-75902		
V151			N16-T-75636		
V1601	2		N16-T-56840-60		
V1603			N16-T-75644		
V201			N16-T-75840		
X1005			N17-C-73244-16918		
X1601	2		N16-S-63515-4162		
X1603			N16-S-62603-6446		
X1606			N17-F-74267-5075		
X251			N17-L-76737-2765		
X3601			N17-L-51629-1001		
X3602			N17-L-51629-1003		
X701			N16-S-54287-5051		
X702			N17-C-73255-1514		
Y1401			N16-C-96132-4201		
Y701			N16-C-96205-1201		
Z1004			N16-A-38801-1127		
Z1006			N16-A-38801-1102		
Z1008			N16-A-38801-1128		
Z1009			N16-F-33591-1476		
Z101			N16-R-33591-1358		
Z1010			N16-A-38801-1104		
Z1012			N16-A-38801-1158		
Z1013			N16-R-33591-1379		

TABLE 7–2. RADIO RECEIVING SET AN/SRR–11A, STOCK NUMBER IDENTIFICATION (Cont.)

REF. DESIG.	NOTES	STOCK NUMBERS			
		FEDERAL	STANDARD NAVY	SIGNAL CORPS	USAF
Z1014			N16–A–38801–1103		
Z1015			N16–F–32631–2017		
Z1016			N16–F–32633–1903		
Z1017			N17–T–67517–4152		
Z1018			N17–T–67517–4263		
Z1101			N16–9–38801–1108		
Z1102			N16–A–38801–1113		
Z1103			N16–A–38801–1111		
Z1104			N16–A–38801–1114		
Z1105			N16–A–38801–1112		
Z1106			N16–A–38801–1107		
Z1107			N16–A–38801–1106		
Z1108			N16–A–38801–1110		
Z1109			N16–A–38801–1109		
Z1110			N16–F–32088–9827		
Z126			N16–R–33591–1357		
Z1301			N16–C–74615–6431		
Z1302			N16–O–66001–1015		
Z1401			N16–C–14435–1001		
Z1402			N16–C–14435–1002		
Z151			N16–R–33591–1356		
Z1701			N16–F–32633–2649		
Z1702			N16–F–99999–0091		
Z1703			N16–F–44106–2081		
Z201			N16–R–33591–1359		
Z701			N16–C–91201–1019		
Z702			N16–F–32602–4376		
Z901			N16–C–91201–1018		

TABLE 7–3. RADIO RECEIVING SET AN/SRR–11A, STOCK NUMBER CROSS REFERENCE

STANDARD NAVY STOCK NUMBER	REFERENCE DESIGNATIONS
GF5120–198–5398	H263
GF5120–224–2504	H262
GF5120–242–7410	H261
GF6240–223–9100	I251
GM3110–100–6209	O–272
GM5120–198–5401	H264
N16–A–38801–1102	Z1006
N16–A–38801–1103	Z1014
N16–A–38801–1104	Z1010
N16–A–38801–1106	Z1107
N16–A–38801–1107	Z1106
N16–A–38801–1108	Z1101
N16–A–38801–1109	Z1109
N16–A–38801–1110	Z1108
N16–A–38801–1111	Z1103
N16–A–38801–1112	Z1105
N16–A–38801–1113	Z1102
N16–A–38801–1114	Z1104
N16–A–38801–1127	Z1004
N16–A–38801–1128	Z1008
N16–A–33801–1158	Z1012
N16–C–14435–1001	Z1401
N16–C–14435–1002	Z1402
N16–C–15624–4666	C1404

STANDARD NAVY STOCK NUMBER	REFERENCE DESIGNATIONS
N16–C–15629–2600	C543
N16–C–15953–2999	C143
N16–C–15955–9916	C203
N16–C–15967–8367	C207
N16–C–16076–9386	C218
N16–C–16139–5946	C206
N16–C–16149–5001	C155
N16–C–16172–9403	C210
N16–C–16237–2583	C132
N16–C–16245–8001	C126
N16–C–16363–7679	C202
N16–C–17882–5695	C1043
N16–C–20267–5896	C1601
N16–C–26601–1443	C716
N16–C–26838–5145	C1304
N16–C–26838–5145	C1048
N16–C–2718–4341	C813
N16–C–28210–1404	C717
N16–C–28547–6325	C211
N16–C–28716–1433	C219
N16–C–28737–7001	C1001
N16–C–29084–4698	C214
N16–C–29133–3841	C812
N16–C–29259–8168	C215

TABLE 7-3. RADIO RECEIVING SET AN/SRR-11A, STOCK NUMBER CROSS REFERENCE (Cont.)

STANDARD NAVY STOCK NUMBER	REFERENCE DESIGNATIONS
N16-C-29370-7461	C106
N16-C-29449-8642	C723
N16-C-29608-2009	C814
N16-C-29713-6603	C102
N16-C-29898-3409	C714
N16-C-30109-3330	C223
N16-C-30114-3006	C1052
N16-C-30183-1890	C1406
N16-C-30188-3727	C1050
N16-C-30367-9395	C1403
N16-C-31833-7866	C1042
N16-C-39693-5927	C1103
N16-C-40024-4700	C1108
N16-C-40120-4737	C108
N16-C-40358-1930	C224
N16-C-41052-5966	C130
N16-C-41064-1134	C1047
N16-C-42733-5753	C107
N16-C-42733-5753	C139
N16-C-42733-5753	C1030
N16-C-42733-5753	C1032
N16-C-42733-5753	C1305
N16-C-42736-4235	C1603
N16-C-42807-4012	C133
N16-C-43633-3542	C1031
N16-C-43633-3542	C1102
N16-C-44111-1231	C104
N16-C-44111-1231	C136
N16-C-44111-1231	C1107
N16-C-45768-8089	C101
N16-C-45768-8089	C718
N16-C-45768-8089	C719
N16-C-45770-1522	C1112
N16-C-45770-1812	C162
N16-C-45770-1812	C254
N16-C-45770-1812	C1053
N16-C-45770-1812	C1055
N16-C-45773-7301	C711
N16-C-45773-8071	C1063
N16-C-46200-7572	C1101
N16-C-46200-7572	C1601
N16-C-49983-2357	C252
N16-C-58716-4907	C128
N16-C-59365-1938	C103
N16-C-60027-1001	C1309
N16-C-63536-1001	C251
N16-C-64040-1181	C710
N16-C-64060-2000	C1029
N16-C-74123-3251	L205
N16-C-74615-6431	Z1301
N16-C-76727-7769	L1013
N16-C-76729-6401	L203
N16-C-76736-6086	L202
N16-C-76748-1800	L204
N16-C-76780-2846	L201
N16-C-91201-1018	Z901
N16-C-91201-1019	Z701
N16-C-96132-4201	Y1401
N16-C-96205-1201	Y701
N16-C-99999-0045	L251
N16-C-99999-0047	T155
N16-C-99999-0051	T126
N16-C-99999-0055	T1014
N16-C-99999-1130	C142
N16-C-99999-1131	C201
N16-C-99999-1132	C205

STANDARD NAVY STOCK NUMBER	REFERENCE DESIGNATIONS
N16-C-99999-1133	C209
N16-C-99999-1134	C217
N16-F-32088-9827	Z1110
N16-F-32602-4376	Z702
N16-F-32631-2017	Z1015
N16-F-32633-1903	Z1016
N16-F-32633-2649	Z1701
N16-F-33591-1476	Z1009
N16-F-44106-2081	Z1703
N16-F-99999-0091	Z1702
N16-G-431136-114	0257
N16-H-15001-337	A270
N16-L-288001-110	03521
N16-L-99999-0046	0106
N16-M-250606-646	0269
N16-O-66001-1015	Z1302
N16-R-28800-2904	L252
N16-R-29792-1061	L1601
N16-R-33591-1335	0255
N16-R-33591-1356	Z151
N16-R-33591-1357	Z126
N16-R-33591-1358	Z101
N16-R-33591-1359	Z201
N16-R-33591-1379	Z1013
N16-R-33591-1387	Z601
N16-R-49426-716	R3602
N16-R-49462-438	R253
N16-R-49579-131	R151
N16-R-49598-811	R105
N16-R-49660-438	R104
N16-R-49689-321	R108
N16-R-49688-811	R153
N16-R-49768-438	R103
N16-R-49768-438	R155
N16-R-49822-438	R130
N16-R-49840-435	R1136
N16-R-49876-438	R1106
N16-R-49922-811	R1014
N16-R-49939-271	R102
N16-R-49939-271	R255
N16-R-50011-438	R101
N16-R-50012-811	R1023
N16-R-50038-438	R1119
N16-R-50092-438	R254
N16-R-50092-438	R1126
N16-R-50128-438	R109
N16-R-50164-435	R1004
N16-R-50236-438	R705
N16-R-50281-438	R702
N16-R-50335-438	R260
N16-R-50308-438	R1008
N16-R-50362-433	R1009
N16-R-50371-433	R1601
N16-R-50371-433	R1304
N16-R-50398-131	R154
N16-R-50398-131	R1111
N16-R-50416-435	R201
N16-R-50416-435	R1003
N16-R-50443-438	R1027
N16-R-50444-131	R1602
N16-R-50479-435	R129
N16-R-50515-433	R1403
N16-R-50587-435	R131
N16-R-50587-435	R1102
N16-R-50632-416	R107
N16-R-50632-416	R1115

TABLE 7–3. RADIO RECEIVING SET AN/SRR–11A, STOCK NUMBER CROSS REFERENCE

STANDARD NAVY STOCK NUMBER	REFERENCE DESIGNATIONS
N16–R–50650–390	R1103
N16–R–50659–433	R1120
N16–R–50677–380	R1116
N16–R–50695–436	R1405
N16–R–50740–380	R1104
N16–R–50740–380	R1121
N16–R–50758–377	R1117
N16–R–50821–276	R1028
N16–R–50822–811	R204
N16–R–50974–438	R703
N16–R–50974–438	R1401
N16–R–50992–275	R1005
N16–R–51019–440	R1108
N16–R–51064–435	R106
N16–R–51136–438	R1029
N16–R–51172–438	R1137
N16–R–65846–3940	R1604
N16–R–66214–8091	R1603
N16–R–85002–6871	R1605
N16–R–87012–5430	R3601
N16–R–87521–8010	R1411
N16–R–87852–5365	R258
N16–R–88919–1361	R251
N16–R–89219–1001	R257
N16–R–99999–0037	R1001
N16–S–34599–7750	A1602
N16–S–470001–128	MP430
N16–S–470001–129	MP431
N16–S–54287–5051	X701
N16–S–62603–6446	X1603
N16–S–63515–4112	Z1601
N16–T–51769	CR1001
N16–T–56840–60	V–1601
N16–T–750286–393	H265
N16–T–751254–406	H266
N16–T–75636	V151
N16–T–75644	V1603
N16–T–75647	V1005
N16–T–75719	V1104
N16–T–75840	V201
N16–T–75899	V101
N16–T–75902	V1109
N17–B–77690–4910	E153
N17–B–77691–3814	E130
N17–B–77936–2407	E103
N17–C–72595–1800	J1701
N17–C–72604–4794	J1704
N17–C–73108–2878	J1705
N17–C–73108–5906	J1707
N17–C–73126–3839	J127
N17–C–73162–3774	J256
N17–C–73185–2849	J102
N17–C–73224–1698	X1005
N17–C–73242–6015	J257
N17–C–73255–1514	X702
N17–C–73257–3744	J103

STANDARD NAVY STOCK NUMBER	REFERENCE DESIGNATIONS
N17–C–73288–1712	J252
N17–C–73304–1318	J1709
N17–C–73317–2189	J259
N17–C–73317–6429	J263
N17–C–73459–9862	J701
N17–C–73531–3457	J702
N17–C–73572–8047	J101
N17–C–73591–1360	J264
N17–C–73605–6389	J1002
N17–C–73606–7745	J1601
N17–C–945001–202	E1701
N17–C–99999–0070	T101
N17–F–14310–380	F1601
N17–F–74267–5075	X1606
N17–J–39248–4418	J265
N17–L–51629–1001	X3601
N17–L–51629–1003	X3602
N17–L–76737–2765	X251
N17–M–18982–9120	M251
N17–M–22713–3543	M252
N17–S–250051–154	E1702
N17–S–59672–7885	S254
N17–S–60080–3251	S255
N17–S–61615–1001	S701
N17–S–63719–3559	S1101
N17–S–65233–6617	S101
N17–S–69074–4589	S102
N17–S–69085–2701	S3601
N17–S–70777–8626	S253
N17–S–73082–9028	S251
N17–S–74139–4844	S252
N17–S–91897–8968	S1001
N17–S–91897–8969	S126
N17–T–26623–4296	E701
N17–T–26653–4296	E1302
N17–T–28244–2475	E689
N17–T–64402–5501	T1101
N17–T–67517–4152	Z1017
N17–T–67517–4263	Z1018
N17–T–67517–4374	T1011
N17–T–67517–4424	T703
N17–T–67517–4469	T1013
N17–T–73701–5366	T1601
N17–T–81385–1533	T102
N17–T–81385–1535	T127
N17–T–81385–1537	T152
N17–T–81403–1420	T128
N17–T–81403–1422	T103
N17–T–81403–1501	T153
N17–T–81406–1515	T104
N17–T–81406–1517	T129
N17–T–81406–1527	T154
N17–T–81412–1526	T105
N17–T–81412–1536	T130
N17–T–81746–5804	T151
N17–T–99999–0199	K1701

TABLE 7-4. RADIO RECEIVING SET AN/SRR-11A, LIST OF MANUFACTURERS

ABBREVIATION	NAME	ADDRESS
AB	Allen-Bradley Co.	118 W. Greenfield Avenue, Milwaukee 4, Wisc.
Allen Mfg.	Allen Mfg. Co.	100 Sheldon Street, Hartford 2, Conn.
Ampenol	Amphenol Electronics Corp.	1830 S. 54th Avenue, Chicago 50, Ill.
Cambridge Therm	Cambridge Thermionic Corp.	445 Concord Avenue, Cambridge, Mass.
Chicago Telephone Supply Co.	Chicago Telephone Supply Co.	Elkhart, Ind.
Communciations Prod.	Communications Products Co., Inc.	Marlboro, N. J.
Dupont	du Pont, E. I. de Nemourt, and Co., Inc.	Wilmington 98, Del.
Magnavox	Magnavox Co., The	Fort Wayne, Ind.
Oak	Oak Mfg Co.	1260 N. Clybourne Avenue, Chicago, Ill.
RCA	Radio Corp. of America	415 So. 5th Street, Harrison, N. J.
Shakeproof	Shakeproof Division of Illinois Tool Works	Elgin, Ill.
Sprague	Sprague Electric Co.	201 Beaver Street, No. Adams, Mass.
Waldes-Kohinoor Inc.	Waldes, Kohinoor, Inc.	Austil Place, Long Island City, N. Y.
Winchester Electronics Co.	Winchester Electronics Co., Inc.	Norwalk, Conn.

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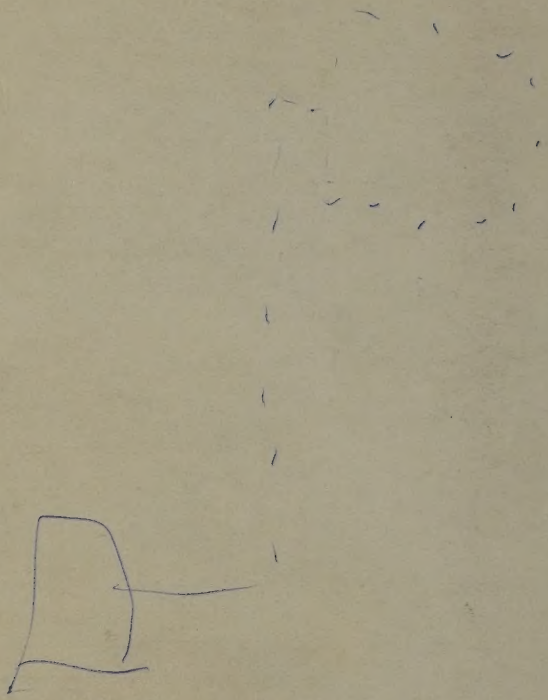
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